RELEASE NO:

KSC-443-67

FOR RELEASE:

Immediate

December 20, 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

SPACE CENTER TO FILL 200

GOVT. JOBS NEXT YEAR

KENNEDY SPACE CENTER, Fla. - - More than 200 additional employees will join the Civil Service staff at KSC in the next seven months.

Ben W. Hursey, Chief of the KSC Personnel Office said, most of the Center's requirements will be for engineers with aerospace experience. He commented that "in the all-out search for the most qualified talent, first consideration will be given to all personnel at Marshall Space Flight Center and any other NASA Centers where a reduction in personnel may occur."

The Spaceport's Civil Service staff numbers 2,720, according to Harry W. Smith, Chief of the Professional Staffing and Examining Branch. This figures does not include some 60 co-operative employees, Youth Opportunity Corps workers and temporary employees.

"This is about 200 more employees than we had last year at this time," said Smith, "and we will be adding about the same number in the next several months. I would say the future here looks pretty bright."

The Personnel Office is maintaining an active college recruiting program. So far this college year, 22 schools have been visited. "We are about halfway through our schedule," Smith related.

He said that, as a general rule, Kennedy Space Center hires 50 new college students a year. The greatest need is for engineers, especially those with degrees in electrical, electronic and mechanical engineering.

Looking even further into the future, Personnel representatives maintain an annual speaking schedule at junior colleges, high schools and elementary schools.

"We talk to the students about Kennedy Space Center and the space program," Smith explained. "We stress the importance of preparing for the future - - and counsel against dropping out of school."

Under this program, Personnel Office employees visit 25 to 30 schools per year. Most of the schools are in Florida.

RELEASE NO: KSC-445-67

FOR RELEASE: Immediate

December 21, 1967

SATURN V STAGES SHIPPED TO KSC

KENNEDY SPACE CENTER, Fla. -- Rocket stages that will make up the third Apollo/Saturn V rocket will be shipped this month to the launch site at the NASA Kennedy Space Center in Florida.

The 7.5 million pound thrust Boeing built first stage is scheduled to depart the Marshall Space Flight Center's Michoud Assembly Facility December 22 aboard the barge Poseidon.

About twelve hours later, the Point Barrow will leave Michoud with the second stage, made by North American.

They are expected to arrive at Kennedy Space Center December 26.

The third stage will be flown directly to KSC from the McDonnell/ Douglas facility at Sacramento, Calif. December 27 aboard the Super Guppy.

The same plane will go to Huntsville, Ala. and pick up the instrument unit from the International Business Machines Company plant and deliver it to KSC December 29.

The stages will be assembled in the Vehicle Assembly Building at KSC. The second Saturn V is in the VAB now being readied for a rollout next month to the launch pad.

The first of the giant space vehicles flew successfully November 9.

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RELEASE NO: KSC-446-67

FOR RELEASE: Immediate

December 22, 1967

ELECTRO-MECHANICAL RESEARCH CO. AWARDED \$155,000 CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$155,000.00 contract to the Electro-Mechanical Research Company of Sarasota, Florida.

The contract calls for equipment and engineering field services to modify existing Electro-Mechanical Research Company equipment in a telemetry checkout system located at the Kennedy Space Center.

Kennedy Space Center conducts manned and unmanned launches from Cape Kennedy and is responsible for assembly, checkout, and launch of the Apollo Saturn V from the new facilities on Kennedy Space Center.

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RELEASE NO:

KSC-447-67

FOR RELEASE:

Sunday

December 24, 1967

KSC WRITES SPACE HISTORY

DURING 1967

KENNEDY SPACE CENTER, Fla. - - The successful mission of the first Saturn V rocket and a record of 23 satellite and space probe launchings for the year by the NASA Kennedy Space Center wrote a new chapter in America's space history during 1967.

Center Director Dr. Kurt H. Debus said, "the KSC 1967 launch record, highlighted by the first flight of the Saturn V is a tribute to the government-industry launch team. I am very proud of their dedication and accomplishments as well as the excellent support provided by the Air Force Eastern Test Range."

The maiden flight of the Apollo/Saturn V on November 9 was hailed as "a giant step toward the moon" by Dr. George E. Mueller, NASA Associate Administrator for Manned Space Flight.

It dramatically increased the confidence of people across the nation in the "management of the largest research and development that the western world has ever engaged in," Mueller said.

The mission was an almost flawless test for the new Saturn V launch vehicle and the Apollo spacecraft. Liftoff was at 7:00:01:.4, less than one-and-a-half seconds off the mark, after a remarkably perfect countdown on the first attempt.

At the conclusion of the textbook flight the spacecraft splashed down in the Pacific on schedule and only six miles from the recovery ship Bennington.

Continuing its successful operations in satellite and space probe launchings, the KSC Unmanned Launch Operations (ULO) team racked up its third record-breaking year in a row.

ULO hit a high batting average, scoring 22 successes out of the 23 launches. Only an Applications Technology Satellite (ATS-2) failed when the second burn on an Agena stage did not occur.

Early in November, ULO set another record by launching three spacecraft -- ATS-3, Surveyor 6, and the ESSA 6 weather satellite -- within six days. The first two launches were from the Cape and the third from Western Test Range.

And in December, as the year drew toward its close, evaluation of the Apollo 4 mission continued. Flight data reports at the NASA Marshall Space Flight Center, Huntsville, Alabama, indicated that all systems of the Saturn V performed nominally and ground support equipment functioned satisfactorily.

At Houston, data at the Manned Spacecraft Center showed that the Apollo spacecraft met all its flight objectives without problems.

The KSC launch team, directed by Rocco Petrone, received personal congratulations from Vice President Humphrey following the successful countdown and launch.

Eighteen of KSC's satellite and space probe launchings were from Cape Kennedy and five were from the Western Test Range at Vandenberg Air Force Base, California.

In addition to the Saturn V, launch vehicles used during the year were Delta (12 launches), Atlas/Agena (6), Atlas/Centaur (4), and Thor/Agena (1).

Spacecraft included scientific, interplanetary, communications and meterological satellites of all sizes and shapes, launched into a variety of lunar, solar, earth and polar orbits, or soft-landed on the moon.

ULO Direct Robert H. Gray was presented the NASA Exceptional Service Award in ceremonies in Washington, D.C. for supervising the ULO launch team performance.

Probably the most dramatic of the year's ULO launches was the Mariner 5 Venus mission. The spacecraft was launched from Cape Kennedy in mid-June. Its object: to obtain information on the origin and nature of Venus and its environment.

Mariner 5 achieved "one of the highest accuracies on any Atlas Agena ever launched on an interplanetary mission," according to Gray.

It took 128 days to make the 217 million mile flight. On October 19, Mariner 5 hurtled to within 2,480 miles of the planet in a perfect fly-by.

Photographs were not taken, but valuable information was obtained by the various experiments aboard the spacecraft.

The Lunar Orbiter Project, to photograph the moon's surface, was successfully concluded with the launching of three spacecraft. Lunar Orbiter 3 was launched in February, Lunar Orbiter 4 in May and Lunar Orbiter 4 in May and Lunar Orbiter 5 three months later.

Among the major accomplishments of these three satellites, and their two predecessors in 1966, were:

Pinpointing eight Apollo landing sites for astronauts; mapping the moon's surface 10 times better than has ever been done by earth telescopes; mapping, for the first time, more than 90 percent of the hidden side of the moon; and providing high-quality pictures of areas particularly interesting to scientists.

A companion spacecraft, Explorer 35, was placed in orbit around the moon to take precise readings on radiation, micrometeoroid and magnetic environment.

Another spectacular achievement of the year was the successful soft-landing of three Surveyor spacecraft on the lunar surface.

Surveyor 3 was the first of the type to be launched in 1967 and it was placed on the most exact trajectory yet known. It would have landed only 260 miles from its target on the moon even without a midcourse correction. But, as good as this was, subsequent Surveyors were launched so well that one required less than a 40-mile course correction.

Surveyor 3 landed on the moon in April and returned 6,319 photographs and provided 18 hours of operation of its surface sampling device.

Surveyor 4, launched in July, performed well until the last few seconds of burn of the retromotor when all communications with the spacecraft were lost. The cause and the fate of the spacecraft are still unknown.

In September, Surveyor 5 soft-landed in the area called the Sea of Tranquility. In the 14 days prior to the first lunar sunset, its camera returned 18,006 photographs of the moon's surface in its vicinity, of the magnetic experiment aboard, and the operation of the alpha scattering device used to analyze the composition of the moon's surface.

In November, Surveyor 6 successfully landed on target in one of the most rugged areas of the moon. Scientists had only given it a 50-50 chance of survival.

It has sent back a record number of photographs and became the first spacecraft to be successfully moved and relocated on the lunar surface.

All but one of the remaining 13 ULO missions in 1967 were earth orbiters.

Explorer 34, for example, was placed into an eccentric earth orbit in May. The data received from instruments aboard are being used to study sunearth relationships. Particular emphasis is placed on how solar events influence the earth's environment during the period of increasing solar activity.

Three Intelsat 2 satellites established a multi-purpose intercontinental communications link during the year. Intelsats Pacific 1 and 2 were launched into a stationary orbit in January and September, respectively. The third Intelsat, Atlantic 1, was placed into a stationary orbit in March increasing the capability of the Atlantic communications link established by Early Bird in 1965. These missions were launched by KSC for the Communications Satellite Corporation.

To improve weather forecasting, three Environmental Survey Satellites were placed into orbits from the Western Test Range.

The first, ESSA 4, was launched in January. ESSA 5 followed in April and ESSA 6 in November. All are now providing daily global cloud pictures and central processing and analysis by weather bureaus throughout the world.

Two Applications Technology Satellites (ATS) were launched by Atlas Agena vehicles from Pad B.

Designed to improve space technology, the first spacecraft - ATS 2 - failed to achieve a desired orbit. However, it did succeed with some of its experiments.

The second spacecraft, ATS 3, was successfully launched in November and sent back full-disk color photographs of earth from a stationary orbit.

Each of these photographs has included portions of five continents: North and South America, Africa, Europe and Antartica.

Basic solar physics investigations were continued with the launching of two more Orbiting Solar Observatories in March and October aboard Delta rockets. Designated OSO 3 and 4, they are designed to study the sun and its influences in the interplanetary space near the earth.

An Orbiting Geophysical Observatory (OGO 4), launched in a polar orbit in July, is providing scientists with another sensor packed laboratory equipped to study the sun's influence on the earth's environment.

The OGO program is expected to provide data helpful in improving weather prediction and communications, since both are affected by solar radiation.

Another spacecraft, Biosatellite 2, was launched in September to determine the effects of weightlessness and radiation on the early growth of insects, plants and bacteria. The spacecraft was successfully recovered after a 45-hour flight.

Scientists are hopeful that these experiments will enable them to predict the effects on astronauts during long flights into outer space.

The final ULO launch of the year was Pioneer 8 in December.

The spacecraft was rocketed into an extremely wide orbit about the sun, ranging from approximately 93 million to 102 million miles from the sun's surface. This is approximately the route traveled by earth as it also orbits the sun.

RELEASE NO. KSC-451-67
FOR RELEASE: January 1, 1968

December 29, 1967

NASA SCHEDULES 29 LAUNCHES FOR 1968

KENNEDY SPACE CENTER, Fla. -- National Aeronautics and Space Administration launch teams will be kept busy in 1968 with a total of 29 major launches scheduled from Kennedy Space Center, Florida, and the Western Test Range at Lompoc, California.

The year's activities will bring about a number of firsts, but will begin with a "last". Surveyor G, the last of the highly successful Surveyor series designed to photograph the lunar surface and analyze the lunar soil after a soft landing, is scheduled for launch on January 7 from Cape Kennedy.

Another last will come with the launch of the Orbiting Geophysical Observatory E. This mission will mark the final scheduled flight of an Atlas Agena vehicle from Cape Kennedy. The hydrogen fueled Centaur will take over from the Atlas Agena for the unmanned interplanetary probes and high altitude earth orbital launches.

Apollo 5, scheduled for January 17 launch, will be the first test (unmanned) of the Apollo lunar module and will mark the beginning of an ambitious schedule for the Saturn launch teams. Two unmanned tests of the lunar module are scheduled for 1968, both to be launched by the Uprated Saturn I. The first manned test of the Apollo spacecraft will also be launched this year by the Uprated Saturn I.

The 7.5 million pound thrust Saturn V, tested for the first time in November of 1967, is scheduled for three flights in 1968, all from the new spaceport complex at Kennedy Space Center.

KSC's Unmanned Launch Operations teams will be kept busy moving between launches at Cape Kennedy and the Western Test Range. Thirteen scientific satellites are scheduled for launch from KSC facilities on Cape Kennedy. In addition to the OGO and Surveyor already mentioned, ULO will launch four Intelsat communications satellites for the Communications Satellite

Corporation; Applications Technology Satellite D (ATS-D); an Orbiting Astronomical Observatory and an Orbiting Solar Observatory; Biosatellite D; HEOS (Highly Elliptical Orbiting Satellite), launched for the European Space Research Organization; Pioneer D; and Skynet, a British communications satellite.

Interspersed with these Cape launches, ULO teams will travel to the Western Test Range for ten launches in 1968, including four Tiros Operational Satellites for the Environmental Science Services Administration of the Department of Commerce, Orbiting Geophysical Observatory F (OGO-F), Geodetic Explorer B (GEOS-B), Nimbus B, Interplanetary Monitoring Platform G (IMP-G), Radio Astronomy Explorer A (RAE-A), and International Satellite for Ionospheric Studies (ISIS), a joint U.S. and Canadian program. ULO will continue to rely on the Delta and Thrust Augmented Delta (TAD) as the workhorse for earth orbital missions with the Centaur playing an increasingly important role in interplanetary and high earth orbit launches.

In addition to the 29 major missions in space, about 250 sounding rockets and scientific probes of the upper atmosphere will originate at NASA's Wallops Station off the Virginia coast.

RELEASE NO:

KSC-19-68

FOR RELEASE:

January 31, 1968

January 31, 1968

FIRST U.S. SATELLITE'S

POSITION FIXED IN 1968

KENNEDY SPACE CENTER, Fla. - - The first U.S. satellite, Explorer I, launched 10 years ago tonight, will be passing over Casablanca at 10:47 EST this evening - the same hour of its launching from Complex 26 at Cape Kennedy - and will pass over the Nile River in Egypt at 10:58 P.M. - the same time it was first injected into orbit.

Positions reported by the Goddard Space Flight Center will be as follows:

10:47:56 PM EST 33 degrees North latitude, 9 degrees West longitude

10:58 PM EST 25 degrees North latitude, 33 degrees West longitude

- end -



RELEASE NO:

KSC-20-68

FOR RELEASE:

Immediate

January 29, 1968

EXPLORER I - SATURN V -

BOTH HISTORIC EVENTS

KENNEDY SPACE CENTER, Fla. - - The historic launchings of the Explorer I Satellite ten years ago and the first Apollo/Saturn V space vehicle less than three months ago both ushered in new eras of space exploration, but that is where the similarity ends.

By comparison, the Saturn dwarfs the Jupiter-C in height, weight, propulsion, and payload capability. Checkout and launch comparisons between the two vehicles reveal the technological advances to date.

The mammoth Saturn V measures 363 feet tall and 33 feet in diameter, compared with 70 feet high and 5 feet 10 inches wide for the Jupiter-C.

Arriving by plane 42 days prior to its launch on January 31, 1958, the modified Jupiter-C was first taken to Hanger D in what is now the Cape Kennedy Industrial Area for preflight tests and checkout.

There the launch vehicle underwent weight and center of gravity tests, calibration checks and various other systems checks. At that time all checkouts were performed manually.

A total of 75 measurements were taken on the Jupiter-C, while measurements on the Saturn V totaled 2,894.

Approximately 84 days passed from the time the Army Ballistic Missile Agency was given the mission of orbiting a satellite until actual launch.

With the first Saturn V it took over a year of preparation for launch. In addition to the vehicle, support facilities and ground support equipment also had to be checked out.

Following 27 days of tests in Hanger D, the Jupiter-C was moved to Pad 26. There the main stage was erected and preflight tests were conducted. After a spin test of the upper 3-stage cluster, Jet Propulsion Laboratory and Missile Firing Laboratory personnel joined the upper stages to the main stage.

Because of their size, the Saturn V first and second stages are shipped to KSC by barges and the third stage is flown in by a specially designed airplane called the Super Guppy.

The stages are moved into the Vehicle Assembly Building, where the Saturn V is assembled and all checkout test measurements are processed through computers in a firing room in the Launch Control Center.

The Apollo 4 vehicle and spacecraft were moved to Pad A aboard the transporter in a vertical, launch ready position.

Computer data links that were disconnected for the rollout were again hooked up between the space vehicle, control and monitor links were verified, and propellant loading tests and spacecraft systems verification checks were completed.

A week before the launch, a countdown demonstration test was conducted. This was a complete dress rehearsal of the actual countdown, including propellant loading. The test ended just before engine ignition.

Prior to entering the actual 49-hour countdown, a final readiness test was conducted to ensure all elements of the mission were ready.

On the day of the Jupiter-C launch, the 12-hour countdown was started by turning on critical power and making preparations for fueling. Part of the countdown included checks to "Put up 'NO SMOKING' signs on Pad" and "announce 'NO SMOKING' on public address system prior to fueling".

Fueling was not a remote control process for the Jupiter-C as it was for the Saturn V. Fuel and alcohol were manually loaded from tank trailers that had backed up to the space vehicle on the pad.

It took approximately one hour to load 29,350 gallons of liquid oxygen, 912 gallons of hydrogen peroxide, 128 gallons of water, 87 gallons of alcohol, and 3,315 gallons of fuel aboard the Jupiter-C.

Fueiing operations for the Saturn V took about four hours to load 214,200 gallons of RP-1 and 346,000 gallons of liquid oxygen.

When it came time to launch the Jupiter-C, there were about 55 people in the blockhouse performing launch operations tasks. About 450 personnel in Firing Room #1 of the Launch Control Center were required for the Apollo 4 mission.

A single engine developing 83,000 pounds of thrust in the Jupiter-C first stage launched the first United States satellite on its historic mission. Less than 10 years later, five engines on the Saturn V first stage developed 7.5 million pounds of thrust to start a 285,000-pound payload on its trajectory into deep space.



RELEASE NO:

KSC-22-68

FOR RELEASE:

Immediate

January 29, 1968

TWO SATURN V'S IN VAB

AT KENNEDY SPACE CENTER

KENNEDY SPACE CENTER, Fla. - The pace of activity is quickening at KSC as crews in the Vehicle Assembly Building simultaneously prepare two Apollo/Saturn V's for launch.

Erection of the AS-502 space vehicle was completed in December, just a few weeks after the successful launch of AS-501 on November 9, a flight that was termed a "storybook" success.

Plans call for the 502 vehicle to be moved from high bay 3 of the Vehicle Assembly Building to the launch pad in February. There, it will undergo a Flight Readiness Test and Countdown Demonstration Test prior to launch during the first quarter of the year.

Test Supervisor Jim Harrington said there have been no significant problems. "It looks like a very good vehicle", he said.

"One of the major objectives of this launch" said Harrington, "will be to test the structural integrity of the new quick opening hatch on the command module of the spacecraft system during reentry."

The third Apollo/Saturn V - - 503 - - is being assembled in high bay 1 of the VAB. Test Supervisor Bill Schick's team has successfully completed erection of the S-IC stage. This took place December 30, following refurbishment of Mobile Launch 1 which was used for the Apollo 4 launch.

Schick, who was assistant test supervisor on Apollo 4 said, "Overall, things are going smoothly on the 503. We have no real problems right now."

Assembly and checkout of the 502 is monitored from firing room 2 of the Launch Control Center; the 503 from firing room 1.

RELEASE NO: KSC-23-68

FOR RELEASE: Immediate

February 2, 1968

PLAYALINDA BEACH TO BE TEMPORARILY CLOSED

KENNEDY SPACE CENTER, Fla. -- Playalinda Beach will be temporarily closed to the public while the Apollo 6 launch vehicle undergoes final preparations for launch at Complex 39A.

On February 5, the day before the Saturn V is moved from the Vehicle Assembly Building to the launch pad, the temporary gate now located south of Playalinda Beach on Beach Road will be relocated just East of Wilson interchange, where Kennedy Parkway North and Beach Road meet.

These safety precautions will prevail until shortly before launch when the safety limit is extended and the Wilson interchange will then also be closed. After the launch, the beach area will be reopened to the public.

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FOR RELEASE: Immediate

February 29, 1968

YOUNG KSC EMPLOYEES TO MEET VICE PRESIDENT HUMPHREY

KENNEDY SPACE CENTER, Fla. -- Two members of the Kennedy Space Center's Youth Opportunity Campaign will join Vice President Hubert Humphrey at Tinker Field in Orlando Saturday when Humphrey watches a spring training workout of his favorite baseball team, the Minnesota Twins.

The Vice President will dedicate two bridges in his honor at Cocoa tomorrow afternoon and later will meet most of the state's leading Democratic figures.

The youths who will join him at the ball park and meet some of the Twins are Ronnie Chambers, 20, of Cocoa Beach and James Brooks, 17, of Cocoa. They will meet the Vice President at 11 a.m. as he alights from a helicopter from Sanford where he will spend Friday night.

The boys will be accompanied by Ben W. Hursey, KSC Personnel Director, and Nat Pilate, coordinator of the Youth Program at the space center.

Chambers and Brooks are among 19 young people who work at the Spaceport under the YOC, whose formation in 1965 was spearheaded by the Vice President.

The Youth Opportunity Campaign created by President Johnson, is aimed at providing extra work and training opportunities for the youth of the country in need of these facilities.

The campaign is an extensive one directed at all sectors of the economy, including federal, state and local governments; private employers; labor unions; trade associations; churches; colleges, and other large organizations.

Humphrey is chairman of the President's Council on Youth Opportunity. His purpose in meeting the YOC people from KSC is to point up the role of youth in the nation's space effort. More young people are employed at other NASA centers throughout the nation and at NASA Headquarters in Washington, D.C.

The Vice President will receive a briefing from the KSC representatives on how the youth program is working at the Spaceport.

Chambers, a senior at Cocoa Beach High School, was employed by NASA under the YOC beginning February 2, 1967. He began work in engineering drafting, moved to the Central Instrumentation Facility at the Center and now is an administrative trainee in the NASA-Eastern Test Range Liaison Office.

Brooks is a senior and a star basketball player at Monroe High School. Employed at KSC under the Youth Opportunity program since January 1967, he is assigned to the Administrative Operations and Planning Office of Launch Vehicle Operations.

For his basketball prowess he has received scholarship offers from Jacksonville University, Florida A & M, Utah State and Baldwin State Teachers College.

Both he and Chambers work 16 hours a week at KSC in addition to their school work.

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RELEASE NO:

KSC-143-68

FOR RELEASE:

Immediate

April 11, 1968

GRADUATE STUDENT STUDIES RARE SPARROW AT KSC

KENNEDY SPACE CENTER, Fla. - - A University of Wisconsin graduate student in wildlife ecology is combing about 10 square miles of the Kennedy Space Center's 88,000 acres in search of the rare Dusky Seaside Sparrow.

During his first week here, Brian Sharp found only three of the Dusky sparrows, which are apparently in danger of becoming extinct.

Brian, 24, and his petite wife, Kathi, are residing in a house on the Merritt Island National Wildlife Refuge, KSC, during the summer while he makes as accurate a census of the Dusky as possible.

He will make the survey through a 6,400-acre area by foot and boat.

When we arrived at the salt marsh, Brian listened a moment, and then said: "The Dusky is singing away as though he doesn't know he is becoming extinct.

"He really puts on a show of bravado, flying around his own little territory to make sure no other Dusky males have invaded it. What he doesn't realize is that he is challenging non-existent rivals."

The Dusky probably has the most limited distribution of any North American bird, Brian said. This is due to the fact that here and just west of Indian River City near the St. Johns River are the only large salt marsh areas that the bird inhabits.

"Now," he added, "this entire habitat is being altered by dikes and flooding to control mosquitoes. The Dusky will now have the nest over water."

The sparrow eats mostly small inverterbrate animals, such as small crustaceans, grasshoppers and caterpillars.

- more -

The Dusky's bill is more slender than the triangular-shaped bills of most sparrows. It has evolved this way because it eats insects instead of having to crack hard seeds.

The Dusky likes to throw his head back and emit a tiny two-syllable song.

In front of each eye is a yellow spot and his underside is white with black streaks. However, his wings and back are a dark, grayish brown, appearing black from a distance.

The Dusky was discovered at Salt Lake on the mainland in 1872 by C. J. Maynard, Florida bird watcher and author. Maynard then came to Merritt Island and found them in abundance.

The Dusky belongs to the Family Fringillidae (sparrows and finches) and genus and species Ammospiza nigrescens.

Asked why he chose to study and count the Dusky, Brian said:

"I prepared a session for a seminar on rare birds in general and found that we know nothing about what we can do for most of them.

"Two years ago the U.S. Fish and Wildlife Service listed 78 different species of birds, mammals, fishes and reptiles threatened with extinction.

"I chose the Dusky because I'd like to find out how many there are left."

Brian was born in Washington, D.C., his mother an American and his father a British Naval Officer. When he was six months old, the family moved to Bradford, England, where they lived until 1958. They then returned to Philadelphia.

Receiving a Bachelor of Arts degree in Comparative Literature at Wesleyan University in Connecticut, he then transferred to the University of Wisconsin where he is earning a Master's degree in Wildlife Ecology.

He has completed his 30 hours of course work and will write his thesis on his work with the Dusky.

This work could be extremely important for the Dusky, as the management of the refuge and the mosquito control unit have stated they seek ways to preserve the sparrow once more is known about it.



RELEASE NO:

KSC-144-68

FOR RELEASE:

Immediate

April 11, 1968

FEMININE TOUCH SPICE FOR SUCCESS RECIPE

KENNEDY SPACE CENTER, Fla. - - Mix hard work and dedication and add the feminine touch seasoned with experience and you've got a recipe for success.

Such is the case of two NASA employees at the Kennedy Space Center.

Marlene Davis, Chief of the Administrative Section of the Personnel Office, is responsible for processing some 12,000 to 15,000 personnel actions per year.

Janie Callahan is an aerospace technologist on the Flight Safety Staff of the Apollo Program Office concerned mainly with analyzing the planned trajectories of all Saturn vehicles.

Attaining these responsible positions was no easy task.

Marlene began her career with NASA in the Headquarters Personnel Office in 1958, some 27 days after NASA came into existence. There were about 200 people on the rolls when she began work and this number increased to about 1,600 when she transferred to KSC in 1962.

"When I came to KSC," she said, "we were handling personnel work for about 500 KSC employees and 300 who were working for the Marshall Space Flight Center. Now we have some 3,000 personnel records."

Charles Orrill, Chief of the Personnel Program Development Branch, said Marlene "has broadened her knowledge of personnel administration substantially beyond that basically required in her position.

"Through her own initiative, she has assumed significant coordinating responsibilities between KSC and NASA Headquarters in implementing the NASA-wide automatic data processing-centered Personnel Management Information System.

- more -

Orrill said her ability to supervise production against tight deadlines while maintaining "espirit de corps" among the seven employees under her is outstanding.

The majority of the personnel actions processed by her group, he said, relate to pay and the ultimate in accuracy is absolutely necessary.

In analyzing trajectories, Janie Callahan uses the full resources of her educational and professional background.

Janie received Bachelor and Masters degrees in mathematics from Texas Christian University in Fort Worth, Texas and worked for the Convair Division of General Dynamics there until she came with NASA at KSC in February, 1963.

She said the Flight Safety Staff at KSC receives the proposed trajectories of the Saturn vehicles and "we work closely with the Range Safety Office to determine the position of impact limit lines for each flight.

"This is to protect vital areas on land, and we won't let any launch threaten beyond these lines."

Arthur H. Moore, Chief of the Flight Safety Staff, said he had been working with Janie since 1963, and "she's quite exceptional, real sharp.

"I let her handle all the mathematical problems that come up and I also send her to a lot of technical meetings.

"On one occasion she was sent to a national meeting in San Francisco as the only representative of KSC."

Janie views the United States space efforts as "very necessary. We should not let the program fall to the wayside.

"The study of space is fascinating. We have so much to learn and so far to go."

While Marlene enjoys going to the beach during her leisure, Janie enjoys sewing, knitting and decorating her home on South Merritt Island.

release

RELEASE NO:

KSC-145-68

FOR RELEASE: Immediate

April 11, 1968

KSC PROCUREMENT OFFICER TO SPEAK AT SYMPOSIUM

KENNEDY SPACE CENTER, Fla. - - Procurement Officer William M. Lohse, Kennedy Space Center, will deliver the theme address at the first annual symposium of the Federal Government Accountants Association of Cape Kennedy April 26.

Lohse will speak at 10:45 a.m. on the Truth in Negotiations Act, which is Public Law 87-653.

Raymond Einhorn, Director of Audits for NASA in Washington, D. C., will moderate a panel discussion on this public law. Others serving on the panel include:

Paul A. Barron, Deputy Director of Procurement, NASA, Washington, D. C.; John A. O'Hara, Director of Contract Policy and Planning, The Boeing Company, Seattle, Washington; Bernard B. Lynn, Deputy Director of the Defense Contract Audit Agency, Alexandria, Virginia; and Theodore M. Kostos, Partner, Stassen, Kephart, Sarkis and Kostos, Philadelphia, Pennsylvania.

The keynote address on "Research and Development in Educational Improvement" will be given by Dr. Robert L. Hopper, Regional Director of the Southeastern Educational Laboratory, Hapeville, Georgia.

Major General David M. Jones, Commander of the Air Force Eastern Test Range, Patrick Air Force Base, Florida will be the luncheon speaker.

- end -



RELEASE NO: KSC-147-68 FOR RELEASE: Immediate

April 11, 1968

ENGINEERING KNOW-HOW PAYS OFF FOR KSC OFFICIAL

KENNEDY SPACE CENTER, Fla. -- Creativity coupled with engineering know-how are prerequisites for designing and building the giant mechanical wonders used to transport, service and launch the Apollo/Saturn V space vehicle at the Kennedy Space Center.

One man that fills this bill is Don Buchanan, Engineering Manager for KSC's Launch Complex 39.

Buchanan was a principal figure in the original studies in 1962 made to determine the best facilities and methods of launching the 363-foot-tall Saturn V.

At that time he was working in the Launch Support Equipment Engineering Division of the Launch Operations Directorate, under Dr. Kurt H. Debus, now Director of KSC.

Out of these studies came the four-tracked transporter, the mobile service structure and the mobile launcher. Buchanan is responsible for their operation.

"When the original studies were made," he said, "the transporter was a darkhorse. As we went along, however, we found that it offered more than a barge system, particularly with respect to stability and mobility."

The first studies for a mobile launcher were for a vehicle height of 250 feet, and it grew to the present height of 363 feet.

"There wasn't any similar structure to compare the mobile launcher with, so we compared it with buildings. We had a problem getting people used to proportions.

"A mistake in geometry would have been quite severe in dealing with facilities that size. It's just as tough to design the mobile launcher as it is the crawler in many respects, although we had more problems with the crawler.

The mobile service structure originally was intended to be stationary, but it was reconfigured and fitted to the crawler, he said.

Buchanan explained that, due to the enormity and complexity of the structures, "we used computers for heat transfer analysis, dynamic structure analysis and stability design.

"I would have hated to have tackled the job without computers."

Buchanan said there have been problems as could be expected in such a large program, "and there will be still more problems. But we have the system to such a state that we will be able to carry out all missions.

"The biggest jobs now are to modify the structures for different vechicles, assure all adequate safety measures, and implement designs through configuration controls to assure that the hardware is compatible with the software."

There are now two transporters, three mobile launchers and one mobile service structure available for Saturn V launches.

The transporter, which moves the space vehicle and mobile launcher from the Vehicle Assembly Building to the launch site, is 131 feet long and 114 feet wide. During the rollout, the transporter transfers the 12.6-million-pound load 3.5 miles to the launch pad. The deflection due to leveling would be so close that the tip of the vehicle would never get out of the dimensions of a basketball.

Once it reaches the ramp, automatic load-leveling devices keep the vehicle in a vertical position while ascending the five percent slope to the top of the pad where the vehicle and mobile launcher are placed on adjustable supports.

Two main drive diesel engines provide 5,500 horsepower. Two other diesels generate 2,130 horsepower for leveling, jacking, steering, lighting, ventilating and electronic systems.

The transporter has a speed of one mile per hour when carrying the vehicle and mobile launcher, .75 mph when transporting the mobile service structure and 2.2 mph when unloaded. It can negotiate curves as close as 500 feet mean radius.

The mobile launcher has a base platform measuring 25 feet high, 160 feet long and 135 feet wide.

Nine service arms extend from the launcher's tower and are designed to swing rapidly away from the vehicle. Five of these arms retract after vehicle lift-off and are secured against the tower in approximately five seconds.

The three astronauts will enter the Apollo spacecraft through the top service arm. Others carry vital umbilical lines for propellants, pneumatic functions and electrical cables as well as providing access for personnel servicing the stages.

The Saturn V is positioned on the launcher and secured by four support and holddown arms. At the pad these arms hold the vehicle during thrust buildup of the engines.

A 45-square-foot opening in the base platform permits passage of engine exhausts at ignition.

The mobile service structure is a 402-foot-high tower which weights 10.3 million pounds.

The structure contains five service platforms that provide circular access to the space vehicle for final servicing at the launch site. The two lower platforms can be adjusted up and down the vehicle, while the three upper platforms have a fixed elevation.

Like the mobile launcher, the service structure is transported to the launch site by the transporter. It is removed from the pad a few hours prior to launch and returned to its parking area which is approximately one and one-half miles from the pad.

RELEASE NO: KSC-150-68 FOR RELEASE: Immediate

April 11, 1968

APOLLO APPLICATIONS PROGRAM PANEL HOLDS SESSIONS AT KSC

KENNEDY SPACE CENTER, Fla. -- An Apollo Applications Program (AAP) panel met yesterday and Tuesday at the Spaceport to discuss communications and instrumentation systems connected with AAP flight hardware and ground support equipment.

The panel consisted of AAP representatives from KSC, the Marshall Space Flight Center in Huntsville, Alabama, and the Manned Spacecraft Center, Houston.

KSC will conduct all the launch operations associated with the Apollo Applications Program. The flight hardware is designed and developed at the NASA centers at Huntsville and Houston.

Also attending the discussions, which dealt mainly with intercenter interfaces, were representatives of contractor firms involved in meeting AAP systems requirements for the Saturn 1 Workshop/Airlock, the Apollo command/service module, and other payloads.

Chairman of the meetings was Robert B. Krause, senior KSC member of the panel.

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RELEASE NO: KSC-151-68

FOR RELEASE: 10:00 a.m.

April 11, 1968

NASA-AIR FORCE AGREEMENT JOINT PHOTO OPERATION

Air Force's Eastern Test Range and NASA's John F. Kennedy Space Center have agreed to consolidate their photographic operations under one contractor to achieve savings estimated at more than \$1 million the first year.

Presently each agency draws its photographic support from separate contractors - Radio Corporation of America as a subcontractor to Pan American Airways provides this service to Air Force Eastern Test Range, and Technicolor Corporation as a subcontractor to Ling-Temco-Vought, Inc. provides this service to the Kennedy Space Center.

Under the new proposal a single contractor, to be selected by a competitive bid, would report directly to the contract manager, Eastern Test Range. Air Force and NASA will each provide a technical manager to monitor the contractor's performance in meeting each agency's requirements.

The agreement grows out of a several-months' joint study which sought to reduce the cost of photographic support of launch operations from its present annual level of about \$7 million. Recent reductions in earlier estimates of the total photographic workload on both agencies have made it possible to consider the economies of a consolidated operation.

A single contractor operation is expected to begin January 1, 1969. About nine months is required for negotiation of the new contract and for the orderly transition from the present to the planned operation.

Savings in the operation will be achieved by consolidating all motion picture film processing at the Patrick Air Force Base laboratory and in processing all still photos at the KSC lab. Motion picture production for both agencies will also be done at KSC.

Field operations will be centralized at Cape Kennedy from where photographic crews will be assigned to NASA and military launch complexes depending on requirements established by the technical representative of either agency.

A cadre of specially qualified personnel will handle the normal Apollo/ Saturn test operation requirements for NASA with extensive cross servicing from other members of the photo pool during peak launch operations.

Similarly, cross-servicing arrangements for such peak Air Force requirements as Titan III launches will be guaranteed under the single contractor concept.

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RELEASE NO: KSC-230-68

FOR RELEASE: Immediate

May 17, 1968

ENGINEERS TO TOUR SPACEPORT AND CAPE

KENNEDY SPACE CENTER, Fla. -- About 350 persons attending the 48th annual meeting of the Society of Military Engineers will tour the Spaceport and Cape Kennedy today (Friday).

They will embark on the tour shortly after hearing a luncheon speech at the Ramada Inn by Dr. Kurt H. Debus, Director of the Kennedy Space Center. He will speak on "NASA's Space Program."

Some 600 persons are attending the two-day meeting which ends today.

The engineers will view Air Force and NASA facilities on Cape Kennedy and will visit Complex 39, at the Spaceport.

Complex 39 is the scene where America's giant Apollo/Saturn V space vehicles are assembled and checked out, and launched in the Apollo program aimed at landing U.S. astronauts on the moon.

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RELEASE NO: KSC-235-68
FOR RELEASE: Thursday A.M.

May 21, 1968

SATURN STAGES UNDERGOING MODIFICATIONS

KENNEDY SPACE CENTER, Fla. - - The first and third stages of the first Saturn V to be manned and related ground support equipment are being modified at the Kennedy Space Center while the second stage is undergoing cryogenic pressure proof testing at the Mississippi Test Facility to bring the vehicle up to a man-rated configuration.

An unmanned flight was originally planned for this 363-foot-tall space vehicle, now scheduled to carry a manned Apollo spacecraft into earth orbit late this year.

However, this Saturn V flight from Launch Complex 39 will not be the first manned test of the Apollo spacecraft.

Launch Complex 34 crews are readying the smaller Saturn IB for a manned flight late this summer or early fall.

An electrical systems test was completed on the launch vehicle this week and radio frequency and telemetry checks are now in progress.

The Apollo service module for the Saturn IB flight, now designated Apollo 7, arrived last Friday and the command module is due near the end of this month.

The second stage for the Saturn V vehicle is scheduled to be returned to KSC in July and the vehicle can then be remated with the first and second stages on the mobile launcher in the VAB for final tests and checkout before launch.



RELEASE NO: KSC-237-68
FOR RELEASE: Thursday A.M.

May 21, 1968

NASA EMPLOYMENT AT KSC REMAINS STABLE

KENNEDY SPACE CENTER, Fla. - - - Due to the nature of the work performed at the Spaceport, KSC has been exempted from a NASA Headquarters notification to other centers to hold permanent employment to their on-board Civil Service as of May 13 due to budget considerations.

A Headquarters spokesman said there would be no forfeiture of employees and no loss by attrition at KSC, and that the current Civil Service employment level should remain stable.

Headquarters advised the other elements that their on-board strength may be decreased by allowing only one of four losses by attrition to be replaced.

By taking this action, NASA is minimizing the impact of potential manpower adjustments which may become necessary at the beginning of the new fiscal year.



RELEASE NO:

KSC-239-68

FOR RELEASE: Thursday A. M. (May 23, 1968)

May 21, 1968

KSC EMPLOYEE ACCEPTED FOR GRADUATE STUDY PROGRAM

KENNEDY SPACE CENTER, Fla. - - James W. Johnson, Chief of the Technical Support Operations Branch of Unmanned Launch Operations, has been accepted for a year's graduate study in the Stanford-Sloan Program.

Johnson was nominated as KSC's candidate for the business management and humanities-oritented program "because of his outstanding contributions to the Unmanned Launch Operations and his capability for assuming greater technical management responsibilities.

"He has demonstrated an outstanding ability in comprehending management problems and has exercised imagination in developing better systems, concepts and methods to resolve them."

Johnson, who holds a Master of Science Degree in Research and Development Management from Florida State University with his thesis on "An Analysis" of the Function of Spacecraft Coordination for Unmanned Spacecraft." will begin work at Stanford University September 16.

The Stanford-Sloan Program offers various field trips, courses and seminars with business and government officials designed to aid in developing better manufacturing techniques and production methods and in understanding economic policy formulation of business and government, national and international.



RELEASE NO: KSC-248-68 FOR RELEASE: Immediate

June 4, 1968

HONEYWELL AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$28,000 contract to Honeywell, Incorporated, Computer Control Division of 1000 Woodcock Road, Orlando.

The contract calls for an electronic circuit system which will be used by the Spaceport's Data Translation Section to store electronic data during Apollo/Saturn launches.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.

- end -



RELEASE NO: KSC-249-68 FOR RELEASE: Immediate

June 4, 1968

VAN PELT SERVICE STEEL DIVISION AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$40,269 contract to the Service Steel Division, Van Pelt Corporation of Cincinnati.

The contract calls for corrosion resisting steel tubing which is used in spacecraft support piping at the Space Center.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.

- end -



RELEASE NO: KSC-250-68 FOR RELEASE: Immediate

June 4, 1968

LIGHTNING & TRANSIENTS RESEARCH INSTITUTE AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$72,160 contract to the Lightning & Transients Research Institute of 3011 Foshay Tower, Minneapolis.

The firm will provide service and materials necessary to conduct a study and analysis of various systems used by the Spaceport's electronic design branch.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.



RELEASE NO: KSC-251-68 FOR RELEASE: Immediate

June 4, 1968

MELLEY MOTOR SUPPLY AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$174,415 contract to Melley Motor Supply, Inc., of 7912 Batavia St., Pittsburgh.

The contract calls for five 300 KW modular generator sets used by the Space Center's plant engineering and maintenance division to support Apollo/Saturn launches.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.



RELEASE NO: KSC-253-68

FOR RELEASE: Immediate

June 3, 1968

NASA TOUR ATTENDANCE RUNNING AHEAD OF LAST YEAR

KENNEDY SPACE CENTER, Fla. -- NASA tour attendance in the first five months of 1968 exceeded the same period last year by 28.4 percent.

For the month of May, attendance was 19 percent higher than the same month in 1967. Actual figures were 25,284 a year ago and 30,078 in May, 1968.

Trans World Airlines operates the public visitation program for NASA, maintaining the Visitor Information Center located on KSC. Greyhound conducts the bus tours as sub-contractor.

Tour patronage thus far in 1968 totaled 245,493 persons on May 31st. In the five months of 1967 the total was 191,232.

In 1968, by categories, the tour patrons included:

Adults 179,992

Youths and Children 42,804

Students 22,697

A special lecture demonstration is provided for student groups of 20 or more.



RELEASE NO:

KSC-255-68

FOR RELEASE:

June 6, AM

June 5, 1968

QUALITY SURVEILLANCE TEAM PROVIDES TECHNICAL DIRECTION AT SPACEPORT

KENNEDY SPACE CENTER, Fla. -- Design Engineering Directorate has a closely knit six-man Quality Surveillance team whose functions spread out to all areas of the Spaceport.

Headed by rocket veteran William E. Wheeler, the group's main function is to provide technical direction and guidance to 26 Air Force inspectors in evaluating the effectiveness of the mission support contractors' quality assurance systems as related to ground support equipment.

Wheeler, who has worked on the Redstone, Jupiter, Atlas and Saturn programs during the past 13 years, is mainly concerned with administration and coordinating the activities of his group.

Four of the men working in the group -- space systems quality control representatives -- have duties related to the activities of different contractors.

The KSC men and the respective contractors are: John Claxton, Catalytic-Dow; Dave Felix, Boeing; Hub Badous, Chrysler; and William Claus, General Electric.

A fifth quality control representative, Arnold Watson, works on special processes such as non-destruct testing for the other four groups.

The contractors' work as related to the quality group is as follows: Catalytic-Dow, design responsibility for facilities; Boeing, design responsibility for mechanical systems in Launch Complex 39; Chrysler, design responsibility of mechanical systems in Launch Complexes 34 and 37; and General Electric, electrical and electronic design of Launch Complexes 34, 37, and 39.



RELEASE NO:

KSC-256-68

FOR RELEASE:

June 6 A.M.

June 5, 1968

KSC'S JEANNE JOHNSON ON LAST LEG TOWARD PRIVATE FLYING LICENSE

KENNEDY SPACE CENTER, Fla. - - For Jeanne Johnson, learning to fly seems like the natural thing to do.

She got the background for flying during the 15 years her father managed an airport in Minnesota.

Employed in the Planning and Programming Section of the Telemetry Branch, Information Systems, Kennedy Space Center, Jeanne started taking lessons in March at Tico Airport after joining the Moonport Aero Club.

She flew solo after seven hours and just completed her first dual cross-country flight to Orlando, Daytona and back to Tico.

She wants to qualify for a pilot's license by the end of the summer, but her training will be interrupted in July by a trip to Hawaii to be with her husband, Pfc. Ralph N. Johnson.

He will be there for rest and relaxation from service in Vietnam.

"Eventually he wants to learn how to fly," she said, "and someday we'd like to have our own plane. Then, if we want to take a trip, we'll fly."

But before she's on her own flying, Jeanne has to have 40 hours of flying time, 20 of them solo. Of these 20, 10 of them must be cross-country."

Jeanne will fly commercially to Hawaii, although they tried to get me to fly to the West Coast. I just said, 'Oh, NO!'"



KSC-257-68

FOR RELEASE: June 6, AM

June 5, 1968

SPACEPORT DIRECTOR OF INSTALLATION SUPPORT FINDS WORK CHALLENGING

KENNEDY SPACE CENTER, Fla. - - Frederic H. Miller has a keen knowledge of what it takes to support flying operations -- from jet airplanes to Saturn rockets.

As Director of Installation Support for the Kennedy Space Center, Miller is responsible for the general operation and maintenance of the installation.

Before retiring in 1966 as a Major General in the Air Force, Miller served as Commander of the Middletown Air Materiel Command, Olmstead Air Force Base, Pennsylvania.

Asked what motivated him to enter the space field, Miller said:

"When I began to consider what I would like to do after retiring from the Air Force, I decided I would look for work that was as interesting and challenging.

"I had been flying since 1932 when we flew fabric-covered biplanes with Liberty engines, and working in the space program seemed a natural evolution from flying."

Miller said the work and atmosphere at KSC "has more than met my expectations. I'm delighted that I came and was able to fit into the program.

"All the challenges, interest and enthusiasm of getting on with the job of getting to the moon provides a stimulating environment."

He said Installation Support's functional responsibilities, in one way or another, support KSC missions, either in test, checkout or launch operations.

"In terms of specifics," he said, "we play a significant role in the fields of security, fire protection, medical support, electrical power, food, disaster control planning, photography, reproduction, and publication services, logistics, and maintenance of buildings and permanent structures except for test and launch complex facilities."

He also maintains quality control surveillance over incoming KSC-procured material and equipment and provides administrative services for library, mail and distribution services, and issuance of KSC directives.

"During tests and the countdown to launch," Miller said, "people in certain areas -- KSC Civil Service employees as well as TWA and LTV personnel -- are on the alert and manning consoles related to their responsibilities in the Launch Control Center firing rooms."

Miller's right-hand man in Installation Support is Deputy Director C. C. Parker. "We're fortunate to have a man of his experience at the Center," Miller said.

Office Division chiefs in the Directorate include:

P. A. Fagnant, Center Administrative Services Office; S. E. Carlson, Management Support Office; J. F. Russo, Documentation Division; G. E. Harrington, Logistics Division; R. C. Daley, Plant Engineering and Maintenance Division; R. A. Gramer, Quality Surveillance Division; W. E. Andruss, Requirements and Resources Office; C. L. Buckley, Jr., Security Office; and D. W. Hardin, Test Support Management Office (acting).

"We've got highly qualified people in Installation Support who contribute immeasurably in support of KSC missions," Miller said.

"These executives have excellent managerial ability and know how to stretch the dollar."

Miller said there has been a substantial evolution in the role of Installation Support in relation to Launch Operations and "the flights of AS-501 and 502 revealed that we made positive contributions in our various fields.

"Our biggest challenge is to develop operational methods and procedures to assure that Installation Support's role is satisfactorily executed. Then, we must provide the level of support to launch and non-launch operations at proper standards in the face of reduced availability of funds."

In attaining the high military rank and his present position at KSC, Miller's educational background played a significant role.

He was graduated from Purdue University in 1932 with a degree in Electrical Engineering and received a Masters Degree in Business Administration in 1949 from the University of Pennsylvania.

In 1953, he was graduated from the Industrial College of the Armed Forces, and in 1954, he completed the 26th Advanced Management Program at the Harvard Business School.

Miller, who enjoys golf and fishing as hobbies, lives in Cocoa Beach with his wife, Alice. They enjoy traveling, and Mexico is next in their travel plans.



RELEASE NO: KSC-261-68 FOR RELEASE: June 6, A.M.

June 5, 1968

HONEST EMPLOYEE RETURNS \$100 OVERPAYMENT TO KSC CREDIT UNION

KENNEDY SPACE CENTER, Fla. -- Dale Pope is an honest man . . . just ask the Kennedy Space Center Credit Union.

After a recent payday, Dale cashed his check at the Credit Union and on Friday went to deposit it in the bank.

"I stood at the bank window about 20 minutes trying to figure out how I got an extra \$100," he said.

"On Monday I went back to the Credit Union and asked if they were short on money and they said, 'Yes, we're \$100 short'. I wrote them out a check for it."

Freida Ezell, Credit Union Manager, said there was no way of knowing what happened to the money and, "We wrote a letter to Mr. Pope's supervisor in the Reliability and Quality Assurance Office, Apollo Programs, commending his honesty."

RELEASE NO: KSC-263-68
FOR RELEASE: Wednesday, June 5

June 4, 1968

MSF MANAGEMENT COUNCIL REVIEW HELD

KENNEDY SPACE CENTER, Fla. -- The monthly Manned Space Flight Management Council review was held at KSC today with representatives from the three manned space flight centers and NASA headquarters attending.

The reviews are held each month at one of the manned space flight centers or at NASA headquarters in Washington. The subjects reviewed include Manned Space Flight management operations, safety, Apollo and Apollo Applications programs, future planning, resources and budgetary matters.

Attending the day-long meeting were over 50 management personnel including Dr. Kurt H. Debus, Director of Kennedy Space Center; Dr. Robert F. Gilruth, Director of the Manned Spacecraft Center, Houston, Texas; Dr. Wernher von Braun, Director of the Marshall Space Flight Center, Huntsville, Alabama; and Dr. George E. Mueller, Associate Administrator for Manned Space Flight, NASA headquarters, Washington.



RELEASE NO. KSC-267-68
FOR RELEASE: Immediate

June 12, 1968

POLICE OFFICIALS FROM 19 COUNTRIES TO TOUR THE SPACEPORT AND CAPE

KENNEDY SPACE CENTER, Fla. -- Thirty-five English speaking police officials from 19 countries throughout the Free World will tour the Spaceport and Cape Kennedy tomorrow (Thursday).

They are members of the International Police Academy who are attending a lecture course in police work in Washington, D.C., under the auspices of the U.S. Agency for International Development.

They are from countries in Asia, South and Central America, and Africa.

Their course includes a 13-day visit to cities in Florida and elsewhere in the southeast to discuss police techniques with local officials.

During their tour of the Spaceport, they will witness the scheduled Air Force launch of a Titan 3 vehicle from a vantage point on the NASA causeway between KSC and the Cape.

They will tour Launch Complex 39, including the Vehicle Assembly Building and the Launch Control Center.

The Apollo/Saturn V space vehicle, which will land U.S. astronauts on the moon, is assembled in the VAB and launched from Complex 39.



RELEASE NO: KSC-268-68 FOR RELEASE: Immediate

June 19, 1968

CHARLES E. BOHLEN TOURS SPACEPORT WITH STATE DEPARTMENT OFFICIALS

KENNEDY SPACE CENTER, Fla. -- The former U. S. Ambassador to the Soviet Union, Charles E. Bohlen, who now serves as Deputy Under Secretary of State for Political Affairs, toured the Center yesterday as guest of Dr. Kurt H. Debus, the Director.

Major General David Jones, Eastern Test Range Commander, joined Dr. Debus in welcoming Mr. Bohlen and a group of State Department officials.

They included:

George C. Denney, Jr., Deputy Director, Bureau of Intelligence and Research

Herman Pollack, Director, International Scientific and Technological Affairs

Dr. Robert T. Webber, scientific attache in the U. S. Embassy in Japan

Ernest K. Lindley, special assistant to the Secretary of State

Charles W. Bray, III, special assistant to Ambassador Bohlen

Sidney N. Graybeal, Deputy Assistant, Science and Technology Bureau, U.S. Arms Control and Disarament Agency

Robert T. Grey, Jr., special assistant

John P. Walsh, deputy executive secretary, Executive Secretariat

The new Chief Scientist, U. S. Air Force, Dr. John C. Fisher, accompanied the State Department group.



RELEASE NO:

KSC-271-68

FOR RELEASE:

Immediate

June 14, 1968

PLANNING RESEARCH CORPORATION AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$49,406 contract to the Planning Research Corporation of 1100 Glendon Avenue, Los Angeles.

The contract calls for necessary services and materials to study methods of performing component reliability assessments based on Field Failure Rates.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.



KSC-272-68

FOR RELEASE: Immediate

June 14, 1968

JERVIS B. WEBB, COMPANY AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$116,872 contract to the Jervis B. Webb Company of 9000 Alpine, Detroit.

The contract calls for delivery, installation and testing of an automated material handling system used in the receipt and distribution of supplies at the Spaceport.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.

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KSC-275-68

FOR RELEASE: Immediate

June 19, 1968

AMPEX CORPORATION AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$30,790 contract to the Ampex Corporation of 1325 N. Atlantic Ave., Cocoa Beach.

The contract calls for an instrument recorder used by the RF Systems Branch to record test data of the upcoming Apollo/Saturn 205 and 503 manned launches.

The Kennedy Space Center conducts unmanned and manned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.



KSC-276-68

FOR RELEASE: Immediate

June 19, 1968

AMPEX CORPORATION AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$99,648 contract to the Ampex Corporation, 401 Broadway, Redwood City, California.

The contract calls for a wide band analog magnetic tape recorder/reproducer system for support of Apollo/Saturn space vehicles.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.



RELEASE NO: KSC-277-68
FOR RELEASE: Immediate

June 19, 1968

GARDNER CRYOGENICS CORP AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$184,250 contract to the Gardner Cryogenics Corp., 2136 City Line Rd., Bethlehem, Pa.

The contract calls for the company to provide the Space Center an indefinite quantity of liquid helium as required during the next year.

The liquid helium will be used for the lunar module reaction control system thruster rockets. The lunar module will carry two Apollo astronauts to and from the lunar surface.

The liquid helium also will be used to support other areas of Apollo/Saturn V space vehicle launches.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.



KSC-278-68

FOR RELEASE: Immediate

June 19, 1968

WESTRONICS, INC AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$46,908 contract to Westronics, Inc., 3605 McCart St., Fort Worth, Texas.

The contract calls for a spare parts kit for maintenance and repair of 262 Westronic D6C recorders which are used in calibrating measurements for all Saturn launches at the Space Center.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.



RELEASE NO: KSC-285-68
FOR RELEASE: Immediate

June 18, 1968

APOLLO 7 SPACECRAFT TESTING

The Apollo spacecraft which will carry three astronauts on an 11-day earth orbital mission late this summer will undergo combined systems testing this week at the National Aeronautics and Space Administration's Kennedy Space Center.

The combined systems test validates simultaneous performance of all systems and subsystems.

Crew for the mission, designated Apollo 7, will be Astronauts Walter M. Schirra, Jr., commander; Donn F. Eisele, command module pilot, and Walter Cunningham, lunar module pilot.

The spacecraft was installed in the KSC altitude chamber last week. Following the combined systems test it will be put through both unmanned and manned altitude runs.

The spacecraft will be further tested in the KSC Manned Spacecraft Operations Building preparatory to being moved to Launch Complex 34 at Cape Kennedy where it will be placed on its Saturn IB launch vehicle. Tests and checkout procedures have been underway on the launch vehicle on the pad for several months.

The Apollo 7 mission will demonstrate performance of the spacecraft's command and service modules, the crew, and the support facilities during an earth orbital mission nearly 11 days in duration.

A Saturn IB will boost the Apollo into a 120-by-150 nautical mile orbit with a mid-morning launch from Cape Kennedy Launch Complex 34.

During the second revolution, the flight crew will separate the Apollo from the rocket's upper stage and perform a transposition and simulated docking maneuver similar to the one to be performed on a mission to the moon.

The first two Apollo service propulsion system burns will establish orbital parameters for rendezvous with the rocket's upper stage approximately 30 hours into the mission. The Apollo service module reaction control system thrusters will be used for final phases of the rendezvous.

Thirty minutes of station keeping with the rocket stage will follow the rendezvous.

Primary emphasis during the mission will be demonstration of Apollo subsystems operations. A series of five additional Apollo service propulsion system burns will be performed under various control modes.

An eighth burn will be a de-orbited maneuver, under control of Apollo's guidance and navigation subsystem.

Reentry will be controlled manually by the crew, with splashdown in the Atlantic at approximately 7 a.m. EDT on the 11th day.

Astronaut Schirra has flown two previous space missions. On Oct. 3, 1962, Schirra piloted his Sigma 7 Mercury spacecraft on a 9-hour, 6-orbit near perfect space flight. In mid-December 1965, Schirra teamed up with Air Force Lt. Cd. Tom Stafford to accomplish the world's first rendezvous in space. The Gemini 6 spacecraft rendezvoused and maneuvered to within one foot of Gemini 7.

This will be the first space flight for Eisele and Cunningham.

Live television from the earth orbiting Apollo is planned. A TV camera has been flown previously aboard the Mercury flight of Astronaut Gordon Cooper.



RELEASE NO: KSC-290-68

FOR RELEASE: Immediate

June 21, 1968

ROMANIAN DEPUTY PRIME MINISTER TO TOUR THE SPACEPORT TOMORROW

KENNEDY SPACE CENTER, Fla. -- Alexandru Birladeanu, Deputy Prime Minister of Romania and president of the Romanian National Council of Scientific Research, will tour NASA facilities at the Spaceport and Cape Kennedy tomorrow (Saturday).

He will be accompanied by a delegation of Romanian science and technological officials and the Romanian Ambassador to the United States, Corneliu Bogdan.

The Romanian party is in this country as a result of a trip made to Romania last year by Dr. Donald F. Hornig, special assistant to President Johnson for Science and Technology. During his trip, Dr. Hornig invited Romanian officials to visit the United States.

U.S. State Department and National Aeronautics and Space Administration officials also will be in the visiting party.

The group will arrive at the Cape Kennedy Skid Strip at 12:45 p.m.

They will view Cape Kennedy Launch Complexes 17, 26, 36, 14, 19 and 34 while en route to Kennedy Space Center's Complex 39 where Apollo/Saturn V space vehicles are assembled, checked out and launched in America's program to land men on the moon.

Dr. Kurt H. Debus, KSC's Director, will welcome the party to the Spaceport. They will be briefed on the lunar landing program by Rocco A. Petrone, Director of Launch Operations.

They will inspect the Vehicle Assembly Building and the firing rooms in the Launch Control Center, see the transporter which carries the space vehicles to the launch pads, and visit Launch Pad A of the complex.

They will depart at 4:15 p.m.

Among those accompanying the Deputy Prime Minister will be:

Nicolae Barbulescu, Secretary General of the National Council of Scientific Research

Elie Carafoli, Director of the Institute of Fluid Mechanics

Ioan Diaconescu, Section Chief, Institute of Chemical Research

Nicolae Popa, Director, Institute of Research and Design for Machine Tools and Machinery

Victor Toma, Director of Institute for Research and Design of Computer Equipment

Ioan Ursu, Professor, University of Cluj



RELEASE NO: KSC-291-68
FOR RELEASE: Immediate

June 21, 1968

KSC TOPS 90 PERCENT PARTICIPATION IN BOND DRIVE THIRD YEAR IN A ROW

KENNEDY SPACE CENTER, Fla. -- The Spaceport's employees have reached for a star -- and caught it.

For the third year in a row the civil service employees at KSC have exceeded 90 percent participation in the U.S. Savings Bond campaign.

They wound up the 1968 drive with a record 92.3 percent of its personnel buying bonds to help bolster the national economy.

"This means another star for the Minuteman Flag we fly so proudly in front of the Headquarters Building," declared George A. Van Staden, Director of Administration.

Van Staden is chairman of the KSC drive.

Dr. Kurt H. Debus, Center Director, is the 1968 chairman of the overall Brevard County campaign.

The Minuteman Flag is awarded by the Treasury Department to government and private institutions and businesses that reach 90 percent employee participation in the annual savings bond drive.

A white star is added to the blue flag when that record is maintained.

"Extra effort was called for by the Treasury Department in this year's drive," said Van Staden. "With the nation fighting an enemy overseas and battling the threats of inflation at home, the main line of economic defense is the Savings Bond and Freedom Share.

"KSC's civil service employees did their bit -- they invested in America.

"This Center's performance not only placed it in the top ranks of all National Aeronautics and Space Administration installations in the country, but in the forefront of industrial participants as well."

Van Staden added, "Recognition of responsibility to the community is the hallmark of good citizenship. On behalf of Dr. Debus, I want to thank all the good citizens of KSC -- civil service and contractor people -- for their extra hard work and generous response in this important effort."

John Donovan, campaign coordinator for KSC, said results of the Spaceport's aerospace industry campaign will be announced soon.



release

RELEASE NO:

KSC-302-68

FOR RELEASE: Immediate

June 25, 1968

RAYTHEON COMPUTER AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$29,400 contract to Raytheon Computer of Santa Ana, California.

The contract calls for the company to furnish a discrete recording and monitoring system for the Space Center's unmanned launch operations. The system will be used to automatically decode and display in real time, or near real time, discrete events from telemetered data during vehicle flights.

The Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and adjacent Cape Kennedy.



RELEASE NO: KSC-303-68

FOR RELEASE: Immediate

June 25, 1968

THE SIMPLEX COMPANY, INC. AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$34,892 contract to the Simplex Company, Inc., of 1139 North MacArthur Blvd., Springfield, Illinois.

The contract calls for the company to furnish two portable load banks to the Center's Maintenance Branch to provide variable electrical loads for qualification of generators. The portable load banks will assure reliable operation of generators before locating them at the load center to furnish critical electrical power for various phases of the Apollo/Saturn launches.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.



RELEASE NO:

KSC-304-68

FOR RELEASE:

Immediate

June 25, 1968

WESTON INSTRUMENTS, INC. AWARDED NASA CONTRACTS

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded five contracts totalling \$197,872 to the EMR-Telemetry Division, Weston Instruments, Inc., of Sarasota, Fla.

The first contract calls for the company to provide components for the Quick Look Data System to be used in spacecraft operations at the Space Center. This contract is for \$29,700.

The second, for \$38,558, will provide buffered line printer control for the Center's Quick Look Data Station.

A third contract will result in a magnetic tape master control unit for use by the Center's Instrumentation Section in supporting Apollo/Saturn V checkout and launch operations. Value of the contract is \$49,772. A related contract for \$31,592 calls for a magnetic tape transport unit to complete the Quick Look Data Station at the Center.

The final contract is for a logic expansion kit which will provide improved service to contractors for system integration testing of the command, service, and lunar modules of the Apollo/Saturn space vehicles. This contract is for \$48,612.

Work on the contracts will be performed at Minneapolis, Minn., and Sarasota.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and adjacent Cape Kennedy.



KSC-305-68

FOR RELEASE: Immediate

June 25, 1968

ALLAN AIRCRAFT SUPPLY COMPANY AWARDED NASA CONTRACTS

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded two contracts totalling \$55,837 to the Allan Aircraft Supply Company of 11643 Vanowen Street, North Hollywood, Calif.

The contracts call for delivery of various high tolerance fittings for ground support equipment required to prepare Launch Complex 39 for Apollo/Saturn V launches.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.



RELEASE NO:

KSC-306-68

FOR RELEASE:

Immediate

June 26, 1968

THE BOEING COMPANY AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for \$99,950 to the Boeing Company at Cocoa Beach, Fla.

The contract calls for a detailed study of the requirements necessary to launch Saturn IB/Command Service Module space vehicles from Launch Complex 39 at the Space Center. Apollo/Saturn IB space vehicles are now launched from either Launch Complex 34 or Launch Complex 37 at adjacent Cape Kennedy. Only Apollo/Saturn V vehicles are presently launched from Complex 39.

The study will provide cost and schedule estimates for the possible relocation and modification of equipment and facilities at Launch Complex 39 in order to receive, assemble, checkout, service and launch Saturn IB space vehicles. The study will also consider the requirement for additional facilities and equipment.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration.



FOR RELEASE: July 1, 1968
Immediate

MILLIONTH TICKET SOLD FOR KSC BUS TOURS

KENNEDY SPACE CENTER, Fla.—The millionth patron took the public bus tour of the Spaceport today.

He was Glenn Eady of 618 Shadow Lane, Jonesboro, Ark.

With his wife Shirley, his daughter Torya, II, and son Glenn Jr., 12, he stepped up to the TWA ticket sale window shortly before 2 p.m.

The ticket he bought for himself was the historic millionth stub sold since the public bus tours were inaugurated on July 22, 1966.

The Eadys were en route to Miami, planning to arrive there tonight.

Instead, they will remain in Titusville until Wednesday as guests of the City of Titusville. A program including dining, dancing, sightseeing, fishing and other activities is planned for them.

The Spaceport will make a presentation to its millionth bus visitor and his family at 9:30 tomorrow morning in the Visitors Information Center, where the bus tours begin their daily runs.

Rocco A. Petrone, KSC Director of Launch Operations, will present an Apollo/Saturn V launch photograph autographed by Center Director Dr. Kurt H. Debus.

Trans World Airlines, which operates the Spaceport tours for KSC, will also make a presentation.

The Mayor of Titusville, Wendell Sease, will present the family with a key to the city.



RELEASE NO. 312-KSC-68 FOR RELEASE: July 2, 1968

KSC AWARDS COMPUTER CONTRACT

KENNEDY SPACE CENTER, Fla.—The National Aeronautics and Space Administration has awarded a rental contract to IBM Corporation, Cape Canaveral, Fla., for the conversion of Automatic Data Processing computer systems at the John F. Kennedy Space Center.

The fixed-fee-plus contract calls for replacement of existing IBM 70/10 computers with 360/40 and 360/50 machines and for conversion of programs for the new machines. The 70/10s are being replaced because of increasing work loads which necessitate newer machines.

Estimated total of the contract, which runs from October 1, 1968, through June 30, 1969, is \$514,989.

The Kennedy Space Center launches manned and unmanned spacecraft in the nation's program of lunar exploration and other space missions.

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RELEASE NO: KSC-316-68 FOR RELEASE: Immediate

July 3, 1968

KSC UNDERTAKES AMBITIOUS SUMMER EDUCATION PROGRAM

KENNEDY SPACE CENTER, Fla. -- The Kennedy Space Center is undertaking by far its most ambitious NASA Space Education summer program, reports Hal Mehrens, Chief of the Educational Branch of the Public Affairs Office.

Mehrens said KSC's region includes Georgia, Florida, Puerto Rico and the Virgin Islands.

Weeklong workshops will be held at some 30 colleges and universities of the region. Educators from 42 campuses will come to the Center for two and three-day training sessions before the program ends in late September.

"This in-depth program," Mehrens said, "is designed to update the curricula of the nation's schools with the latest developments and discoveries from the space program, both in technology and in the sciences."

NASA expects about a million educators to participate in the nationwide program this summer.

Professional educators of the KSC Space Education unit launched their first workshop sessions at the University of Puerto Rico June 1.



RELEASE NO: KSC-317-68 FOR RELEASE: Immediate

July 3, 1968

LETTER FROM SAIGON SURPRISES SPACEPORT'S JANIE CALLAHAN

KENNEDY SPACE CENTER, Fla. -- Janie Callahan was surprised when she received a letter recently from rocket-torn Saigon, Vietnam.

"I didn't know anyone there," she recalled.

Inside the envelope was an article about Janie and her job as an aerospace technologist on the Flight Safety Staff at KSC that appeared in the Saigon Sunday News and a letter from Bill Shettle, formerly with TWA at Cape Kennedy.

The headline on the article reads, "Janie Keeps Watch over Roaring Rockets," and Shettle's letter said:

"If you want to really keep watch over roaring rockets, you have a noble calling but a location of low traffic density."



RELEASE NO: KSC-318-68
FOR RELEASE: Immediate

July 3, 1968

HERB CRIBB RECEIVES TWO MORE AWARDS

KENNEDY SPACE CENTER, Fla. -- Herb Cribb has done it again...twice, in fact.

He has received awards of \$525 for a C-Band Validation Complex suggestion and \$300 for an invention of an improved C-Ban parasitic probe antenna at the Kennedy Space Center.

Cribb is employed in the Communications and Radio Frequency (RF) Section, Telecommunication and Experiment Branch, Spacecraft Operations.

The inventive genius of this technician has earned him \$1,625 in the past two years, \$900 for inventions and contributions and \$725 for suggestions.

Bill Martin, head of the Incentive Awards Program in the Personnel Office, said: "These kinds of suggestions and inventions are the real cost savers at KSC. I understand Mr. Cribb has four or five more in the making."

The suggestion for the C-Band Complex brought KSC a validated savings of \$11,000 by providing a better method of simulating the spacecraft or booster C-Band beacons. It replaces eight pieces of test equipment required to perform prelaunch antenna and transmission line validation.

The features of the improved C-Band parasitic probe antenna provide an antenna having low insertion losses and requiring less power to be used by the interrogating radar.



RELEASE NO:

320-KSC-68

FOR RELEASE:

July 3, 1968

ATKINS RANKS HIGH IN SAFETY RANKS

KENNEDY SPACE CENTER, Fla.--John Atkins ranks high in the safety ranks.

As Safety Director of the Kennedy Space Center, he has helped make the Center one of the safest industrial complexes in the United States.

"This hasn't come easily," Atkins said. "NASA personnel are diligent in assuring safety awareness and contractor safety groups work hard at it.

"More than two-thirds of our people are in medium to high risk work. Keep in mind that most people think only in terms of safety on the complex, but safety encompasses all phases of activity at KSC.

"Within the boundaries of available time, effectiveness and cost,"he said,"KSC and contractor personnel have been trained to act correctly in emergency situations, as indicated in the safety record.

"We've made people conscious of safety procedures," he added, "by asking for demonstrations before major tests. That's how we make sure that they maintain their level of competence."

Basically, Atkins is responsible for making sure that all operations at KSC are performed in an acceptable, safe manner. His office develops safety standards, criteria and policies pertaining to spacecraft, launch vehicles and related safety activities.

He described safety as a risk management program dealing with inherent hazards.

'We have to determine what the hazards are, how to keep them in control, the probability of them getting out of control and, then, what to do about the situation.

- more'-

"We have to take what people have to do and evaluate it against established procedures. It's an evolutionary process we're going through each day at KSC.

"And it's not just a matter of personnel safety. For example, should a propellant spill occur, we first assure the safety of employees, but we've also got to determine the best way of cleaning up the spill to protect the vehicle."

A native of Detroit and an electrical engineering graduate of Notre Dame, Atkins is an old hand in rocketry.

After serving two tours with the Navy -- one during World War II and the second in the Korean Conflict -- he headed the electrical procedures branch of the Navy's Bureau of Ordnance for the Talos missile program at Misawaka, Indiana. There, he organized, staffed and trained personnel for a new quality assurance division.

In 1957 he joined the Air Force Missile Test Center's (now the Eastern Test Range) operations analysis office. He was soon named Chief of the Missile Handling Branch and began setting policies covering the entire Air Force safety program at Cape Kennedy and on the range.

Atkins joined Aerospace Corporation in 1960, and as chairman of the pilot safety active review team, he was responsible for reviewing checkout and acceptance of the Atlas booster that orbited John Glenn in 1962.

He transferred to Space Technology Laboratories in 1962 where he was in charge of reliability on the Minuteman program. He also conducted a number of studies, including one that established precedents on setting up launch windows and built-in holds during countdowns.

In june 1964, Atkins entered the Gemini program in NASA's Spacecraft Test Conductor's Office at KSC

Atkins became Chief of the KSC Safety Office, Installation Support, in January, 1966, and was elevated to the position of Safety Director in January, 1968.

Atkins lives in Satellite Beach with his wife, Betty, and their two children, Becky and Doug.



RELEASE NO: KSC-321-68
FOR RELEASE: Immediate

July 3, 1968

KSC TOUR TO HIGHLIGHT ANTIQUE CAR "SPACE MEET"

KENNEDY SPACE CENTER, Fla. -- A drive-through tour of the Kennedy Space Center and Cape Kennedy in vintage automobiles will highlight the "First Space Meet" sponsored by the Antique Automobile Club of Cape Canaveral.

Art Griffin, Chairman of the club's Tour Committee, said antique car owners from Florida and Georgia have been invited to the meet.

"I don't know for sure how many are coming," he said, "but there are usually between 50 and 150 antique cars at such a meet."

The cars will be on display Saturday at the Sears Town Mall in Titusville. Other activities include a swap and sell session, judging of cars, model car contest, fashion show and awards breakfast.



RELEASE NO: 322-KSC-68 FOR RELEASE: July 3, 1968

EXCELLENT EMPLOYEE PARTICIPATION PUSHES KSC COST REDUCTIONS OVER GOAL

KENNEDY SPACE CENTER, Fla. -- Excellent Federal employee participation swept the KSC cost reduction program over its submission and dollar savings goals, reports Raymond Smith, KSC Cost Reduction Officer.

Through June 21, 304 submissions, representing approximately \$25 million were received. This amounted to 44 submissions above the goal, exceeding the Center's \$14 million goal by 79 per cent.

Smith noted, however, that while the outlook for Fiscal 68's participation appears optimistic, "we must wait until August to find out the number of submissions validated locally and accepted by NASA Headquarters."

He said that even though the dollar value realized is obviously of major concern, individual participation is a most important factor. The "heart" of the program is motivating employees to be cost conscious and find ways to reduce costs through improvements.

Lewis E. Melton, KSC's cost Reduction Manager, described a resurgence of a new and positive cost reduction attitude throughout all areas of the Center.

"Fortunately, this attitude is becoming a way of life here, especially in light of known and possible future budgetary restraints." Melton said.

In a recent memo to his staff, George A. Van Staden, Director of Administration, said: "Only through conscious, consistent economy can we hope to keep KSC intact and in a position to respond to whatever assignments the agency may be given."

Even before final results for this year were in, the Cost Reduction Committee and NASA Headquarters CR Office began formulating plans for Fiscal 69's campaign.



RELEASE NO: 323-KSC-68 FOR RELEASE: July 3, 1968

FLORIDA SMALL BUSINESS FIRMS GET \$5 MILLION IN SPACE CONTRACTS

KENNEDY SPACE CENTER, Fla.—Prime contractors at NASA's Kennedy Space Center awarded about \$5 million to small business concerns in Florida during the nine month period that ended last March 31.

Two of the contractors, LTV and Catalytic-Dow, each awarded subcontracts totaling more than \$1 million, followed by Bendix Launch Support Division, which awarded approximately \$700,000.

The ten top Florida-based small business firms receiving subcontracts include:

McGregor & Werner, KSC, \$834,776; Continental Test Lab, Fern Park, \$369,579; Kononoff & Smith, Inc., Coral Gables, \$153,000; Precision Fabricating & Cleaning, Sharpes, \$137,492; Avionics Research, KSC, \$137,412; Franklin Company, KSC, \$113,806; James E. Turnquist, KSC, \$84,325; Indian River Uniform Rental, Fort Pierce, \$76,878; Computing Technology, KSC, \$60,300; Milgo Electronics, Miami, \$49,450.

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FOR RELEASE: July 13, 1968 A.M.

KSC DEPUTY DIRECTOR OF ADMINISTRATION NAMED

KENNEDY SPACE CENTER, Fla.—A key management position in the Center's staff, vacated in October 1967 by the assignment of Frederic Miller as Director of Installation Support, will be filled by Daniel F. Callahan who joins KSC July 15.

Dr. Kurt H. Debus, Center Director, announced the appointment today. General Callahan will become the Deputy Director of Administration, in the office of George A. Van Staden, the Director.

Prior to this appointment, General Callahan was the manager of Chrysler's Florida Missile Operations in Cape Canaveral, supervising the plant which fabricated and refurbished launch equipment and conducted other manufacturing operations. Earlier, he served as planning director for Chrysler's Defense-Space Group in Detroit and spent a total of five years with the company.

He retired from military service in 1963 while serving as logistics director of the Joint Staff. Previously he had commanded the Mobile, Ala. Air Materiel Area which supported the Jupiter IRBM and other systems, and held other high level management and logistics assignments here and overseas. He retired as Major General, USAF.

General Callahan is a graduate of the U.S. Military Academy, the University of Michigan, the Air War College, and other military schools. He lives in Cocoa Beach with his wife, Mary. The Callahans have two sons, Dan and Tim, who are students in the University of the South, Sewanee, Tenn., and a daughter, Marguerite, at home who attends Theodore Roosevelt Junior High School in Cocoa Beach.



RELEASE NO: 332-KSC-68
FOR RELEASE: July 15, 1968

HONEYWELL GETS SPACEPORT CONTRACT

KENNEDY SPACE CENTER, Fla.--The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$59,892 contract to Honeywell Inc., Computer Control Division of Framingham, Mass.

An integrated circuit core memory unit will be built at the Framingham plant for delivery to KSC on September 2. This unit will be used to fabricate systems for transmitting telemetry data from Launch Complex 39 to the Spaceport's Central Instrumentation Facility during checkout and launch of Apollo/Saturn V missions.

Launch Complex 39 is the launch site for the nation's lunar missions.

The Central Instrumentation Facility houses massive computers and electronic equipment which receive and record vital data from launch vehicles throughout the pre-launch preparations and the launch phase.

The Kennedy Space Center conducts unmanned and manned launches from the Spaceport at Merritt Island and from adjacent Cape Kennedy.



RELEASE NO: 334-KSC-68
FOR RELEASE: July 15, 1968

CINCINNATI FIRM AWARDED KSC CONTRACT

KENNEDY SPACE CENTER, Fla.—The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$67,943 contract to Development Consultants, Inc., 5657 Vine Street, Cincinnati, Ohio.

The one year contract provides for study to develop designs for gaseous nitrogen processing equipment and environmental control system equipment which will be superior to that now being used.

The Kennedy Space Center conducts unmanned and manned launches from the Spaceport at Merritt Island and from adjacent Cape Kennedy.



RELEASE NO. 335-KSC-68
FOR RELEASE: July 15, 1968

AMPEX CORPORATION AWARDED SPACEPORT CONTRACT

KENNEDY SPACE CENTER, Fla.—The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$222,169 contract to Ampex Corporation, 401 Broadway, Redwood City, California.

The contract provides for all maintenance and repair work for one year on all NASA owned Ampex recording equipment at KSC and adjacent Cape Kennedy.

The Kennedy Space Center conducts unmanned and manned launches from the Spaceport at Merritt Island and from adjacent Cape Kennedy.

RELEASE NO: 336-KSC-68 FOR RELEASE: July 15, 1968

ROCKLEDGE FIRM GETS KSC CONTRACT

KENNEDY SPACE CENTER, Fla.—The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$122,388 contract to Scientifics Systems, Inc., 210 Hardee Lane, Rockledge, Florida.

Under the contract, Scientifics Systems Inc. will build a shielded, mobile laboratory equipped to measure electromagnetic fields in support of Apollo/Saturn launches and pre-launch tests.

The Kennedy Space Center conducts unmanned and manned launches from the Spaceport at Merritt Island and from adjacent Cape Kennedy.



RELEASE NO: KSC-350-68
FOR RELEASE: Immediate

July 22, 1968

NEW HAMPSHIRE FIRM AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for \$49,934 to the RdF Corporation of Hudson, New Hampshire.

The contract calls for 170 transducers to be used to measure the temperature of liquid gases, boiling water and hot gases in support of the Apollo Program.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration. A major goal of the Apollo Program is to land American astronauts on the moon and return them safely to earth.



RELEASE NO: KSC-351-68
FOR RELEASE: Immediate

July 22, 1968

ROCKLEDGE FIRM AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for \$39,891 to Scientific Systems, Inc., of 210 Hardee Lane, Rockledge, Fla.

The contract calls for a high speed recording system to display and provide permanent records of real time video data signals in support of the Apollo Program.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration. A major goal of the Apollo Program is to land American astronauts on the moon and return them safely to earth.



RELEASE NO: KSC-352-68
FOR RELEASE: Immediate

July 22, 1968

HEWLETT-PACKARD COMPANY AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for \$95,889 to the Hewlett-Packard Company of Palo Alto, Calif.

The contract calls for an automatic frequency analysis system to provide electro-magnetic compatibility measurements during launch countdowns for Apollo/Saturn space vehicles at the Kennedy Space Center.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration.



RELEASE NO: KSC-353-68 FOR RELEASE: Immediate

July 22, 1968

CONSOLIDATED ELECTRODYNAMICS CORPORATION AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for \$71,760 to the Consolidated Electrodynamics Corporation of Pasadena, Calif.

The contract calls for maintenance and repair services for company equipment owned by NASA at the Center.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration.

- end -



RELEASE NO: KSC-354-68 FOR RELEASE: Immediate

July 23, 1968

YANKEE WALTER CORPORATION AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for \$99,000 to the Yankee Walter Corporation of Los Angeles, Calif.

The contract calls for aircraft-type rescue, crash and fire fighting apparatus for use during space vehicle launch operations.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration.

- end -



RELEASE NO. KSC-355-68

FOR RELEASE: Immediate

July 23, 1968

HONEYWELL, INC. AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for \$37,080 to the Computer Control Division, Honeywell, Inc., of Framingham, Mass.

The contract calls for a computer memory module for use with the lunar and command module simulators utilized to train Apollo astronauts.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration. A major goal of the Apollo Program is to land American astronauts on the moon and return them safely to earth.



RELEASE NO: KSC-356-68
FOR RELEASE: Immediate

July 23, 1968

HATHAWAY INSTRUMENTS, INC. AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for \$60,000 to Hathaway Instruments, Inc., of Denver, Colorado.

The contract calls for a transient recorder to detect, measure, and record electrical disturbances in the power line system in support of space vehicle launches.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration.



RELEASE NO: KSC-356-68 FOR RELEASE: Immediate

July 23, 1968

QUINDAR ELECTRONICS, INC. AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for \$47,542 to Quindar Electronics, Inc., of Springfield, New Jersey.

The contract calls for a 40-channel remote control sub-system in the hazards monitoring system for the launch pads at Launch Complex 39.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration.

- end -



RELEASE NO: KSC-358-68
FOR RELEASE: Immediate

July 23, 1968

FAIRCHILD ELECTRO-METRICS CORPORATION AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for \$91,986 to the Fairchild Electro-Metrics Corporation of Amsterdam, N.Y.

The contract calls for a remote control system for the interference analyzer used to measure radio frequency interference in hazardous areas at the Center.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration.



RELEASE NO: KSC-360-68
FOR RELEASE: Immediate

July 22, 1968

AIAA GROUP MEETS AT KSC TO MAP 1970 CONVENTION

KENNEDY SPACE CENTER, Fla. -- The planning and steering committee of the American Institute of Aeronautics and Astronautics met today at the Spaceport to make plans for the organization's 1970 convention.

The AIAA will convene at KSC in February 1970.

The committee met with W. P. Murphy, Director of KSC's Executive Staff to discuss aspects of the conference and the agenda. The conference will be the AIAA's "Launch Operations" meeting.

The agenda will include a lecture tour of the Kennedy Space Center and Cape Kennedy. Following today's morning meeting, the steering committee inspected the facilities of the two space installations in order to map out details of the tour for the membership.

Murphy and Air Force Col. Robert W. Hoffman, Director of Range Operations for the Eastern Test Range, conducted today's briefings.



RELEASE NO: KSC-361-68
FOR RELEASE: July 24, 1968

VISITING JUDGES TO TOUR SPACEPORT AND CAPE

KENNEDY SPACE CENTER, Fla.—About 100 Florida county and juvenile court judges and state officials will tour the Spaceport and Cape Kennedy tomorrow (Thursday).

The semiannual convention of the Florida County Judges Association and Juvenile Judges Association opens today in the Ramada Inn Motel, Cocoa Beach.

The jurists will be accompanied on the Spaceport tour by several members of the state cabinet or their assistants; Circuit Judges Lamar Winegeart and Marion W. Gooding; O. J. Keller, Director, Florida Division of Youth Services and Marshall M. Criser, president of the Florida Bar.

The visitors will view the gantries of Cape Kennedy and launch facilities of KSC's Complex 39, launch site for NASA's manned lunar landing program.

They will visit the Vehicle Assembly Building, where two Apollo/Saturn V space vehicles which ultimately will fly U.S. astronauts to the moon, are being assembled and checked out.

They will tour the Launch Control Center and view the transporter which carries the Apollo/Saturn V vehicles to the launch pads.

The jurists will be briefed by KSC officials on the effort to land men on the moon and return them safely to earth.



RELEASE NO: KSC-361-68 FOR RELEASE: Immediate

July 30, 1968

TRAFFIC INCREASES AT KSC

KENNEDY SPACE CENTER, Fla. -- During a normal 24-hour working day this month, 50,417 vehicles drove into and out of the Space Center and Cape Kennedy Air Force Station.

Traffic through some access gates reflected a substantial increase over the last counting period. Gate 3 near the mainland south of Titusville tallied 13,940 vehicles compared to 12,766 May 1; Gate 4, on the Titusville Causeway, counted 7,059 compared to 4,957 in April while Gate 1, the main entrance to Cape Kennedy, counted 19,800 compared to 18,271 April 15.

Traffic volume remained practically constant through Gate 2, on SR-3, Merritt Island where 8,564 vehicles were tallied compared to 8,575 April 19 and Gate 5, south of Haulover Canal and used by traffic originating in Oak Hill and points north, reported 1,054 vehicles compared to 1,461 in April.

Some of the Gate 3 increase via NASA Causeway into the Center reflected tourist traffic to and from the Visitor Information Center.

FOR RELEASE: 3 p.m.

July 29, 1968

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration has extended a contract with Trans World Airlines, Inc., New York, for installation support services at the Kennedy Space Center.

The extension is for \$29,130,524 and brings the total of the cost plus award fee contract to \$101,017,194.

The one-year contract runs through December 31, 1968, and calls for project management, maintenance and operations, supply management and operations including freight traffic services, and security and fire protection services at the Spaceport.

The Kennedy Space Center conducts NASA's manned and unmanned launches and is responsible for development of launch facilities for the Apollo/Saturn lunar landing program.

RELEASE NO. KSC-365-68
FOR RELEASE: Immediate

July 30, 1968

ATS-D LAUNCH DATE SET

CAPE KENNEDY, Fla. -- The launch of an Applications Technology Satellite (ATS-D) by a Centaur launch vehicle has been scheduled for no earlier than August 7.

The new launch date was established to permit additional testing time to qualify the modified flight gyro package for the second stage at the contractor plant, General Dynamics/Convair, San Diego, California.

The launch window for August 7 is 6:31 to 7:40 p.m. EDT.

RELEASE NO: KSC-366-68 FOR RELEASE: July 31, 1968

ZWEIGBAUM NAMED CHIEF OF ULO TECHNICAL SUPPORT

KENNEDY SPACE CENTER, Fla.—Robert H. Gray, Director of Unmanned Launch Operations at the Kennedy Space Center, has announced the appointment of Harold Zweigbaum as Chief of Technical Support Operations.

Zweigbaum, former Chief of the Atlas-Agena Program, will replace James W. Johnson who has been granted a fellowship to study under the Stanford-Sloan Program, Stanford University.

Gray also named F. R. Searle as Deputy Chief of the Technical Support Operations.

RELEASE NO:

KSC-367-68

FOR RELEASE:

July 31, 1968

ELECTRICITY USED AT KSC WOULD SERVE 14,000 HOMES

KENNEDY SPACE CENTER, Fla.—The amount of electricity used at the Kennedy Space Center in one month — approximately 21 million kilowatt hours — would furnish power to about 14,000 homes in the same period.

To supply this tremendous requirement, a II5,000 volt loop was established by Florida Power and Light Company to feed into KSC and Cape Kennedy, said Bill Cannon, Chief of the Electrical Branch, Electrical/Electronic Systems Division, Design Engineering.

The loop is tied back into the FP&L grid, the Orlando Utilities Commission, other utilities in Florida and the national power grid.

There are five major Government substations on the loop which transform the power into lower voltage levels for distribution to the various buildings and facilities.

The Orsino substation, situated at the south end of the KSC Industrial Area, serves the electrical needs of the Headquarters, Central Instrumentation, Manned Spacecraft Operations, News Center and Flight Crew Training Buildings and other facilities in that area.

The C-5 substation, located on the west side of the Kennedy Parkway, serves the Vehicle Assembly Building, Launch Control Center, and other Launch Complex 39 facilities.

Launch Complexes 34 and 37, along with other NASA and Air Force facilities, get power from the North Cape Substation.

The South Cape substation normally serves only Air Force facilities at Cape Kennedy.

The C-5 substation receives the II5,000 main-line voltage and transforms it to I3,800 volts for distribution to Launch Complex 39 where the load requirements are heavier than at the other substations. The four remaining units distribute I3,200 volts.

RELEASE NO: KSC-368-68
FOR RELEASE: August 1, 1968

PROCUREMENT CHIEF'S JOB SPREADS TO ALL CORNERS OF SPACEPORT

KENNEDY SPACE CENTER, Fla. -- "I thought the space program would be a real challenge and it has turned out to be greater than I anticipated."

This is the "before and after" of his work with NASA at the Kennedy Space Center as seen by Procurement Officer William M. Lohse.

What motivates a man who, through 147 personnel in four branches, is responsible for filling the vast purchasing and non-personal service needs of the Spaceport.

It's simply trying to do as good a job as possible.

As Lohse put it: "We are a service and support organization set up to try to help the Center carry out its mission through the best suited contract and pricing methods."

A specialty with Lohse is the procurement of ground support equipment.

"This hardware is extremely varied," he said, "ranging from common off-the-shelf items to the one and two of a kind . . . not built until KSC needed them. The crawler is a good example of this."

Lohse said handling of non-personal service contracts is one of the biggest challenges.

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"These contracts take a very comprehensive contract management policy. The Bendix launch support contract is a good example. They have eight major areas covered by 3,000 people."

He said KSC was using an award-fee system when he came in 1965 and that it has worked very well.

Under this system, Lohse said, "the contractors earn their fees based on the level of performance they achieve."

Reporting to Lohse are four Branch Chiefs:

George Lott, Chief of the Management Operations Branch, develops and writes administrative policies and procedures, provides support to the Contract Review Office and takes care of bidding, industrial relations and cost and price analysis.

Charles Clift, Chief of the Material Branch, buys commercial service, hardware, and study contracts.

Jim Rice, Chief of the Support Contracts Branch, handles the launch (including stages and spacecraft) and base support contracts and is responsible for increasing the office's responsiveness by supervision of co-located personnel in most line directorates.

Charles Green, Chief of the Small Purchase Branch, takes care of the spot cash fund and small emergency purchases up to \$2,500, as well as the blanket purchase agreements which are billed monthly.

Another top man in the Procurement Office is Clyde Jones, an incentive-contract specialist.

Lohse served as Deputy Procurement Office for about two years before being appointed to his current position in 1967.

His career with the Government began in 1942 when he enlisted in the Navy and soon was commissioned as Ensign in the Supply Corps.

He has had a broad career in purchasing, serving as Assistant Director, Purchasing Division NPO, Washington, D.C.; Procurement Branch Officer, General Supply Depot NSC, Oakland, California; and Purchasing Division Officer, Naval Aviation Supply Office, Philadelphia, Pennsylvania.

Also, he was Acting Purchasing Director, Military Petroleum Supply Agency, Washington, D.C. before concluding his Navy career as Captain, SC USN, Officer in Charge, Navy Purchasing Office, Washington, D.C.

Lohse received a Bachelor of Arts degree from Colorado State College of Education in 1938 and Masters of Business Administration degree from the Harvard Business School, Boston, Massachusetts, in 1947. He also attended the Naval War College in 1961 and 1962.

He and his wife, "Gus", live north of Cocoa with their two sons, Chris and Chuck. He enjoys golf and bridge as hobbies and is active in Cub Scouts.

nevvs release

RELEASE NO:

KSC-369-68

FOR RELEASE:

August 1, 1968

OPPORTUNITIES FOR WOMEN ENGINEERS ARE GROWING

KENNEDY SPACE CENTER, Fla.—Opportunities for women in the professional engineering field are growing.

That's the word from Mary Driver, personnel staffing specialist who has helped sign up six girl engineers for work at the Kennedy Space Center since the beginning of the year.

"It's been a good year for finding girls," Mary commented. In fact it's been our best. Hiring six lady engineers in a single year is a record here."

The six are Judy Anderson, Helen Bullard, Ann Lavender, Karen Stevens, Ruth Ann Strunk and Mary Golden.

The achievement particularly gratifies Mary because she is also KSC's coordinator for the Federal Women's Program which promotes equal opportunity for women in all areas of government employment.

How does the Spaceport find the women they need to fill their vacant job slots?

There are three main ways, says Mary who has been engaged in the task since 1961 — in the project Mercury days — back when the Spaceport was just a gleam in the space planners eyes.

One way is through applications sent direct to the KSC Personnel Office by girls at college who have qualified themselves for work done at the Spaceport and in the aerospace industry.

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KSC-369-68 Page 2

Another fount of talent, says Mary, is the "friends-of-friends system -- one friend telling another about her job at KSC."

Third and best source is recruiting done by the federal government and private industry on the college campus. Talking directly to the current year's crop of seniors is the system that yields the best returns.

In all the recruiting methods, Mary and her colleagues keep sharp eyes peeled for likely feminine prospects.

"We don't exactly hunt for them, or give them special preference, but we do scan each application carefully for eligible girls or women in order to comply with the equal opportunity policy of the government," Mary explained.

The six lady engineers recently joining KSC are new members of a profession that usually is dominated by men.

A total of 75 women now occupy professional, administrative or technical positions, and all of them -- including a total of 15 engineers -- work at tasks usually handled by the male sex.

The women are holding down jobs in such fields as contract negotiations, resources management (budget), production control, and some are computer systems analysts.

"Fifteen years ago you'd probably find men in all these positions," Mary Driver said. "Today careers in Federal service are definitely open if a girl goes and gets the education and background required for specific professions.

"Here at KSC we're finding that in our job positions sex makes no difference -- women are just as employable as men."

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RELEASE NO:

KSC-370-68

FOR RELEASE:

August 1, 1968

KSC'S FUTURE STUDIES OFFICE RESEARCHES TECHNICAL NEEDS

KENNEDY SPACE CENTER, Fla.--While many of the Kennedy Space Center's personnel are directly concerned with an upcoming launch, J. P. Claybourne's Future Studies Office is researching the needs of new space vehicles and new technology for future missions.

Specifically, his office in the Design Engineering Directorate is charged with developing concepts and conducting studies "which pertain to launch vehicles, manned and unmanned spacecraft, space vehicles and launch facilities preflight preparations, and integration, test, checkout and launch operations at KSC."

Also, he is to determine major item requirements and research needs for the evolution of new technology to support space vehicle launches, including vehicle ground launch systems and foreseeable extra terrestrial launch operations.

In studying new vehicle systems, the Advanced Studies unit examines design data on such items as nuclear stages or solid rocket strap-ons and works out facility requirements and operational plans for KSC.

On a matter such as orbital refueling, this unit would determine the requirements for checkout of the system that would operate in a weightless environment.

The Supporting Development unit is responsible for technological improvements through advanced engineering on existing hardware.

"We are in the manager's role here," Claybourne said. "The actual improvement tasks are performed by the people closest to the particular hardware."

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The Supporting Research office looks at "way out" technological requirements for lunar and planetary exploration such as longer-life power supplies from radioisotopes or nuclear reactors.

"We keep track of mission requirements from near-term to five to 10 years away," he said. "One interesting new development is slush hydrogen -- how to make it, how to store it and how to use it."

Claybourne's office also participates in advanced studies of other centers. For example, if another center came up with new technology involving an upper stage with an ion engine, his office would study it and determine what support would be required to handle the new stage.

Claybourne, a graduate of New York University, served as a Saturn Coordinator with the Missile Firing Laboratory in 1959 and in 1960 as Deputy to Rocco Petrone, then Chief of Apollo Program Management. In 1965 he became Chief of the Future Studies Office.

RELEASE NO: KSC-371-68
FOR RELEASE: Immediate

August 1, 1968

NASA TOURS SHOW 23.9 PERCENT INCREASE

KENNEDY SPACE CENTER, Fla. -- A 23.9 percent increase in attendance last month, compared to July, 1967, was reported today for the NASA Tours program conducted by Trans World Airlines for this Center.

The July 1968 attendance was 96,744.

Since January 1, 1968, 403,368 persons have participated in the daily escorted bus tours of the Center and Cape Kennedy Air Force Station. The total since the program began July 22, 1966, reached 1,094,254.

The concessioner operated a fleet of 28 buses per day on the average last month. In addition, 77 charter buses were accommodated carrying 3,751 persons. Sixteen of these bus trips were under sponsorship of NASA's education program.

RELEASE NO: KSC-373-68
FOR RELEASE: Immediate

August 6, 1968

BJC FACULTY MEMBERS ARE BRIEFED ON SPACEPORT

KENNEDY SPACE CENTER, Fla. -- About 50 new faculty members, librarians and counselors of Brevard Junior College received a briefing on NASA facilities at the Spaceport and Cape Kennedy today (Tuesday).

Purpose of the tour of both areas was to familiarize the educators with the surroundings in which they will work in the school on Clearlake Road, Cocoa, not far from KSC.

They were shown the launch pads of the Cape, including Complex 34 where KSC teams are scheduled to launch the first manned Apollo mission aboard a Saturn IB vehicle this fall.

At the Spaceport, they toured Launch Complex 39 where the Apollo/Saturn V space vehicles are assembled, checked out, and launched in the nation's program to land men on the moon and return them safely to earth.

They visited the Launch Control Center and toured the Vehicle Assembly Building.



RELEASE NO:

KSC-375-68

FOR RELEASE:

Immediate

August 8, 1968

SUMMER INSTITUTE STUDENTS GET BRIEFINGS AT SPACEPORT

KENNEDY SPACE CENTER, Fla.—Twenty-five college students interested in governmental research and development programs, toured the Spaceport and Cape Kennedy today and were briefed on Project Apollo and other U.S. programs in space research.

The students, from all sections of the country, visited the space facilities here as part of a Summer Institute in Public Administration they are attending at the University of Maryland.

The Institute is sponsored by the National Aeronautics and Space Administration's Goddard Space Flight Center in Maryland. They were accompanied on their one-day field trip to the Spaceport by Dr. Michael J. Vaccaro, Assistant Director of Administrative Management at Goddard.

The educational program is aimed at broadening information about government research and development management for the academic community. It also seeks to stimulate interest for such governmental programs in undergraduate students.

In a firing room of the Launch Control Center at Complex 39 the visitors were briefed on the Apollo/Saturn vehicles and spacecraft which will be used to land U.S. astronauts on the moon.

The lunar mission was described for them by Albert F. Siepert, KSC Deputy Director, Center Management.

Later Siepert led the group in a 90-minute discussion of management and administrative techniques.

The group visited NASA's facilities on Cape Kennedy and were briefed on communications, weather, and other scientific spacecraft by James W. Johnson, Chief of the Unmanned Launch Operations' Technical Support Operations Branch.

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PUBLIC INFORMATION OFFICE. 867-2468

nevvs release

RELEASE NO: KSC-378-68

FOR RELEASE: Immediate

August 15, 1968

TEXAS FIRM BUILDING NITROGEN FACILITY TO SUPPLY SPACEPORT

KENNEDY SPACE CENTER, Fla.—A Texas gas firm will provide facilities and a continuous supply of gaseous nitrogen to the Kennedy Space Center's Launch Complex 39 at an estimated savings of \$2.2 million over a three-year period.

Guy Thomas, Chief of the Propellants and Ordnance Branch, Support Operations at KSC, said gaseous nitrogen is used primarily to purge tanks, to place interstages in an inert condition by forcing out the oxygen, and to activate the many pneumatic-controlled valves on the Saturn V launch vehicle.

Presently, this extremely cold nitrogen is brought in by truck in a liquid form to a 500,000-gallon storage tank, he said, from where it is piped into the Converter Compressor Facility (CCF) east of the Vehicle Assembly Building for conversion to a gaseous form.

The Big Three Industrial Gas and Equipment Company, Houston, will provide high and low pressure gaseous nitrogen at a cost of 69.9 cents per 1,000 standard cubic feet.

To deliver the gas, the firm will soon lay a pipeline from the plant and storage facility immediately outside of Gate 2 on Merritt Island, along the west side of Kennedy Parkway, around the north of the VAB to the junction at the CCF.

The plant, which is being constructed on private property will be operated on one or both of two different modes, one a routine day-to-day operation and the other a high-use operation during tests or countdown to launch.

The CCF will be retained in operating condition as a backup system.

The new gaseous nitrogen facilities will be needed to fulfill requirements stipulated by KSC and the Office of Manned Space Flight, NASA Headquarters.

The Big Three Company is operating under a contract issued by the AF Logistics Command at San Antonio, Texas. The contract calls for an activation date of December I, 1968.

The contract provides for 1.77 billion standard cubic feet yearly production for the first two years and 1.585 billion annually for the following three years.

RELEASE NO: KSC-379-68
FOR RELEASE: Immediate

August 15, 1968

DR. HANS F. GRUENE DEDICATED TO JFK'S GOAL FOR LUNAR MISSION

KENNEDY SPACE CENTER, Fla. -- Dr. Hans F. Gruene is committed to fulfill one goal -- the same goal President Kennedy set out in his historic address to Congress on May 25, 1961:

"I belive that this Nation should commit itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to earth."

And, as Director of Launch Vehicle Operations at the Kennedy Space Center under Launch Operations Director Rocco Petrone, Dr. Gruene is playing a major role in preparing for this great scientific and technological achievement.

He is responsible for preflight testing, preparation, and launching of the Saturn IB and Saturn V vehicles in the Apollo manned lunar landing program and operation and maintenance of associated ground support systems.

"We're giving our very best to make that goal," Dr. Gruene said seriously when asked what he was mainly concerned with in his work.

He said that while working on V-2 rockets at the Army's White Sands, New Mexico firing range in the late 1940's, he could not have predicted what has come to pass in the space program.

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"One lesson we have learned," he added, "and that is that you need a goal if you want to accomplish anything. Otherwise, you will just limp along.

"There is an imminent danger now in slowing down the space program. A crash effort, certain to come later, will cost much more."

Dr. Gruene said he expects the Soviet Union to orbit manned space stations or another space spectacular soon and "it will be difficult to explain to our citizens and the world why we, as the wealthiest nation in the world, cannot match or better the Russians."

He expects nuclear upper stages for the Saturn V to be the next major vehicle development, minimizing the expense of building all new ground support facilities.

"Ion engines will possibly be utilized later for planetary travel," he predicted. He said these vehicles probably would be assembled on large orbiting space stations.

He added that man will have to prove he can work in space for the country to be ready for all contingencies.

Dr. Gruene said he first realized the potential of using rockets for space travel in 1944 when working on V-2's at the Peenemunde Guided Missile Center, Germany.

"Dr. Wernher von Braun started urging the use of rockets for space exploration," he said, "but the government at that time didn't like it."

After the war in 1945, Dr. Gruene served as guided missile design engineer at the Army's Ordnance Research and Development facility at Fort Bliss, Texas. Much of the work was done at White Sands.

In 1951, he became Chief of the Guidance, Control and Networks Section of the Missile Firing Laboratory at Redstone Arsenal, then under the direction of Dr. Kurt H. Debus, KSC Director. He was transferred to the Army Ballistic Missile Agency in 1956 in the same capacity.

Dr. Gruene joined the George C. Marshall Space Flight Center staff when that organization was established in 1960. There he served as Deputy Director of the Launch Operations Directorate, dividing his time between Huntsville and the Spaceport.

He was appointed to his present position in August, 1964.

The rockets that Dr. Gruene has worked on include the V-2, Redstone, Pershing, Jupiter, Atlas-Centaur, Saturn I, Saturn IB and Saturn V.

He was born in Braunschweig, Germany, in 1910. He earned his degree in electrical engineering at the Technical University in his hometown. Following graduation in 1935, he became a research engineer. He received his PH.D. in 1941.

Dr. Gruene lives at Cocoa Beach with his wife, Edith. Their son, Peter, will attend the University of Florida this fall and their daughter, Mrs. John Evans, lives in Huntsville, Alabama.



RELEASE NO: KSC-381-68
FOR RELEASE: August 19, 1968

ESTES ACCIDENT

A workman was killed last May 16 at the National Aeronautics and Space Administration's Kennedy Space Center, Fla., when he failed to release pressure from a water line on a launch pad, an investigation board has reported.

William B. Estes, a mechanical technician employed by the Launch Support Division of Bendix Corp., died of his injuries some minutes after the cap on an eight-inch water main blew off and struck him in the chest.

The Board, appointed by the Director of the Center, handed down the opinion that Estes' failure to determine the condition of the water main system and to bleed off the pressure it contained before he released a clamp that held the cap was directly responsible for the accident. Cause of death was traumatic laceration of the liver.

Testimony by witnesses indicates that Estes did not check for nor release pressure in the water line although a bleed valve was located within a few inches of the clamp. The pressure in the line, containing air and water, was so great that when the cap was released, it struck Estes in the chest and propelled him more than six feet into the air. He fell on his back.

Immediate first-aid measures failed to save him and he was dead on arrival at a nearby hospital.

The operation underway at the time of the accident was concerned with preparation for moving the Saturn V Mobile Service Structure to the pad for a major test. The water system had been drained, inspected, and cleaned, and was being refilled to bring the water level up to the pad location so as to connect it to the fire main of the service structure.

The method fo filling the system probably resulted in the pressure being higher than on previous occasions. Although there was an overall procedure covering movement of the service structure, it did not detail the method of filling and did not require the workmen to verify the absence of pressure before opening the clamp.

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KSC-38I-68 Page 2

The Board recommended that the water connection at the pad should be vented to preclude any pressure build-up at that point; that such equipment should be color-coded as hazardous; that a detailed procedure for filling the system tanks and lines should be written; and that the procedure for the hookup of the line should be modified to require verification of the absence of pressure prior to releasing the clamp. It also recommended that liquid systems in general be reviewed and any precautionary measure taken which would minimize the possibility of similar accidents.

Bendix Corporation, which maintains and operates the water system, conducted an independent investigation of the accident with similar findings.



RELEASE NO: FOR RELEASE:

KSC-383-68 August 20, 1968 Immediate

BOEING IS TOP EMPLOYER AT KSC WITH 3,711 ON ITS ROSTER

KENNEDY SPACE CENTER, Fla., -- The Boeing Atlantic Test Center is the largest contractor of the industrial firms engaged in NASA's space exploration program at this installation.

As of June 30, 1968, Boeing employed 3,711. Next largest of the KSC contractors was Trans World Airlines with 3,096 while Bendix ranked third with 2,832.

Other contractors employing more than 500:

| North American Rockwell | 1,947 |
|---------------------------------|-------|
| Federal Electric Company | 1,702 |
| General Electric Company | 1,387 |
| McDonnell Douglas | 1,253 |
| Grumman Aircraft | 1,121 |
| Catalytic Dow | 1,090 |
| International Business Machines | 1,048 |
| Chrysler Corporation | 1,047 |
| Ling Temco Vought | 689 |

Contractor employment totaled about 22,000 persons.

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RELEASE NO:

KSC-384-68

FOR RELEASE: Immediate

August 22, 1968

STRAZA INDUSTRIES **RECEIVES NASA CONTRACT**

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for \$226,469.00 to Straza Industries at El Cajon, California.

The contract calls for a study to increase the performance characteristics and reliability of vacuum jacketed umbilical lines by developing improved components and maintenance procedures.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration.

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RELEASE NO: KSC-388-68
FOR RELEASE: Immediate

August 23, 1968

NEW YORK FIRM GETS NASA CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration has awarded a \$104,195 contract to the Airco Industrial Division, Air Reduction Company, Inc., 150 East 42 Street, New York City, for liquid oxygen for NASA's John F. Kennedy Space Center.

The material is used for fuel cells in the Apollo spacecraft.

The Center is responsible for assembly, checkout and launch of Apollo/Saturn space vehicles used by NASA in the program to land astronauts on the moon and return them safely to earth.

RELEASE NO: KSC-390-68 FOR RELEASE: Immediate

August 26, 1968

APOLLO PROGRAM MAJOR ACTIVITY AT KSC

KENNEDY SPACE CENTER, Fla. -- The Apollo program, NASA's commitment to land astronauts on the Moon and return them to Earth before 1970, accounts for 67 percent of the 25,000 personnel engaged in launch operations and supporting activities here.

As of June 30, 1968, aerospace contractors involved in Apollo at KSC employed 15,709 while Government personnel committed to this program totaled 1,878.

There were 5,363 contractor employees in Saturn vehicle operations, and 2,856 engaged in Apollo spacecraft operations with the lunar module or landing craft, and command and service modules for the journey to the Moon and back.

In support of launch preparations, other contractors employed 4,170 while design tasks required 2,767. Five hundred and fifty-three contractor personnel support the manager, Apollo Program and the Launch Operations directorate staff.

Unmanned launch operations involving scientific spacecraft and the Delta and Centaur vehicles employed 1,184 contractors and 140 Government personnel.

The Apollo Applications Program, planning further use of Apollo vehicles and spacecraft after the initial lunar landing, is in an early phase and accounts for 29 Government employees and 13 contractors. Advanced missions employs 10 Civil Service personnel.

RELEASE NO: KSC-391-68
FOR RELEASE: August 29, 1968

AEROSPACE FIRMS TO BE AWARDED BOND DRIVE FLAGS AT SPACEPORT

KENNEDY SPACE CENTER, Fla., -- Fourteen KSC aerospace support contractors will receive Minuteman flags, emblems of success in the United States Savings Bond drives, in a ceremony at the Spaceport on September 4.

The presentations will be made personally by Glen Johnson, National director of the U.S. Savings Bond Division of the Treasury Department.

The ceremony, in front of the main entrance of the Headquarters Building, will start at II:30 a.m.

Four individuals will receive Flying Eagle Awards, special achievement acknowledgements given to campaign chairmen who exceeded their assigned quotas.

Dr. Kurt H. Debus, KSC director and chairman of the Brevard County Bond drive, will receive a Flying Eagle Award. The three others are: General T.J. Conway, Commander-in-Chief of the U.S. Strike Command and chairman of the Hillsborough County campaign; W.V. Roy, District Manager for Southern Bell Telephone, and A.P. Perez, president of Florida Power and Light Company.

Companies receiving the blue and white Minuteman flags are:

Bendix, Boeing, Catalytic-Dow, Federal Electric, General Dynamics, General Electric, Grumman, IBM, Lockheed, LTV Aerospace, McDonnell-Douglas, Pan-Am, RCA and TWA.

Three firms will be awarded white stars for the flags already in their possession. They are Chrysler, North American Rockwell and Martin Marietta.

RELEASE NO. KSC-392-68
FOR RELEASE: Immediate

August 28, 1968

SCRIVENER FILLS KSC RESOURCES, FINANCIAL MANAGEMENT OFFICE

KENNEDY SPACE CENTER, Fla. -- George A. Van Staden, Director of Administration at the Kennedy Space Center, has named James M. Scrivener as Chief of the Resources and Financial Management Office.

In this capacity, Scrivener is responsible for planning, formulating, managing and coordinating the Center's resources and financial management program.

Scrivener came to NASA from the Department of the Army where he served as Director, Management Office, Office of Secretary of the Army, and as Executive Secretary to a number of Army Boards. He also served as Chief, Budget and Manpower Branch in the Secretary's Office.

He joined NASA Headquarters in 1962 as a Resources Program Specialist in the Manned Space Flight Program Control Directorate. In June 1966 he transferred to the Kennedy Space Center as Deputy Chief of the Resources Management Office.

He is married to the former Joy M. Wilson of Chattanooga, Tennessee. They have two children.

Van Staden said James A. St. Croix replaces Scrivener as Deputy Chief of the Resources and Financial Management Office.

RELEASE NO. KSC-393-68
FOR RELEASE: Immediate

August 28, 1968

ARLIN SMITH, WILLIAM ROCK RECEIVE NEW KSC APPOINTMENTS

KENNEDY SPACE CENTER, Fla. -- Admiral R. O. Middleton, Manager of the Kennedy Space Center's Apollo Program Office, has announced the appointment of two new office chiefs.

Arlin G. Smith, former head of reliability and quality assurance (R&QA) at Michoud Assembly Facility in New Orleans, was named chief of the Apollo Program's Launch Vehicle Office.

Before joining NASA, Smith served with the Army Ballistic Missile Agency at Redstone Arsenal, Alabama. He worked on the initial design of the instrumentation, tracking and safety devices for the Redstone, Jupiter, Juno, and Saturn vehicles.

Smith is a member of the American Society of Quality Control and the National Geographic Society. He is married and has one child.

William Rock comes from the NASA Headquarters, Washington, D. C., where he has been chief of quality assurance of the Apollo Program. He was appointed chief of the R&QA Office of the Apollo Program, which is also responsible for Apollo Applications R&QA.

Rock joined NASA in 1964 serving as chief, Quality Engineering Section at Goddard Space Flight Center, Greenbelt, Maryland, until 1967. Prior to 1964 Rock was with Eastman Kodak, the Army, and Martin Marietta in Baltimore.

Rock is a member of the American Society of Quality Control and the Baltimore Society of Engineers. He is married and has three children.

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PUBLIC INFORMATION OFFICE. 867-2468



RELEASE NO. KSC-394-68
FOR RELEASE: Immediate

August 29, 1968

2,000 MEASUREMENTS COMPUTED FROM APOLLO 7 SPACE VEHICLE

KENNEDY SPACE CENTER, Fla. -- More than two thousand measurements are being taken of the performance of the Apollo 7 space vehicle systems during testing and checkout at Complex 34.

These measurements of pressures, temperatures, vibration, acceleration, voltages, current flow, fuel levels, switch and valve positions, guidance commands, and biomedical data are sent by telemetry transmitters to the Central Instrumentation Facility (CIF) in the KSC Industrial Area.

There the information is processed by computers that relay various portions of it to the Mission Control Center in Houston, the Marshall Space Flight Center in Huntsville, Alabama, and KSC's Complex 34 Launch Control Center, ACE display rooms in the Manned Spacecraft Operations Building, and to the Data Display Room in the CIF.

There are four separate telemetry systems carried on Apollo 7. The first and second stages, the Instrument Unit, and the Apollo spacecraft telemetry transmit signals that tell the story of what's going on aboard the vehicle.

Some of the measurements are relayed continuously, providing complete records from certain sensors. Other measurements are sampled at various rates, such as two or three times each second.

Because Apollo 7 will be a manned flight, the number of spacecraft telemetry measurements will be significantly greater than in previous unmanned missions. Telemetry from the launch vehicle stages remains substantially the same as on previous Saturn IB launches.

The telemetry signals received at the CIF are processed for display and analysis as the event is occurring, or are recorded for post-test study.

Ted Hershey, acting chief of the Telemetric Systems Division, Information Systems Directorate, says there are two types of displays for the quick look data.

"We prepare information from the telemetry input sources for entry into a computer. The computer does certain processing and presents the data on cathode ray tube devices, much like a television screen.

"Other data is displayed on strip charts or event recorders. The computer converts the raw data into signals that are routed to the proper recorders."

The Data Display Room in the CIF is manned by more than 150 people during tests and launch. These include S-IB, S-IVB and Instrument Unit engineers from Chrysler, McDonnell Douglas and IBM, respectively; NASA flight controllers watching the fueling operations, power distribution and control, propulsion system operation and vehicle guidance and control; and Launch Vehicle Operations technical personnel who monitor performance and are available with information and advice in the event non-standard conditions are noted in the data.

All telemetry data is recorded at the CIF so that the information is available for close study whenever required.

"You can reconstruct in detail," Hershey says, "exactly how all your systems performed and from this you can make a determination if you were able to achieve all of the goals that you had set out.

"You can learn more as far as the technology is concerned, by seeing if the systems did perform the way you expected them to in the difficult-to-simulate environments of launch and space."



RELEASE NO. KS C-395-68
FOR RELEASE: August 29, 1968

MILA UNIFIED S-BAND STATION IS COMPLEX ARRAY OF EQUIPMENT

KENNEDY SPACE CENTER, Fla., -- The MILA Unified S-Band (USB) Station at the Kennedy Space Center -- a complex array of antennas, transmitters, receivers, computers, and recorders -- is active now supporting the Apollo 7 pre-launch operations and will soon join its sister stations around the world to support the orbital phase of the mission.

The MILA station, under the direction of the Goddard Space Flight Center (GSFC), is a key segment of the Manned Space Flight Network (MSFN).

Jack Dowling is the GSFC Station Director here and Ted Helm heads the Bendix Field Engineering Corporation's team.

There is a staff of three GSFC engineers and some 200 Bendix engineers and technicians required to operate the station on a continuous basis.

Situated about one and one half miles south of the NASA causeway and east of the Visitors Information Center, the station is comprised of the following:

A sophisticated Unified S-Band Communications System, computers capable of the real time processing of telemetry data from and commands to the spacecraft, air-to-ground communications, a TV receiving system, a trajectory measurement system, associated recorders and ground communications, and its own electric power supply for reliability during operations.

MILA is integrated with other tracking stations through the MSFN Control Center at GSFC to provide mission support to the Flight Director at the Manned Spacecraft Center's Mission Control Center. It is linked with the KSC Launch Control Center, the Central Instrumentation Facility and Manned Spacecraft Operations Building to provide support to the Launch Directors.

To understand the new Unified S-Band System as required for Apollo, it is necessary to turn back to Mercury and Gemini to see how communications and tracking were handled.

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PUBLIC INFORMATION OFFICE, 867-2468

The trajectory was tracked using C-Band radars. Voice communications, telemetry flight data and commands to the spacecraft from the Mission Control Center all used VHF transmitting/receiving equipment.

Each function required its own systems and antennas on board the space-craft and at each of the stations around the world.

For Apollo, NASA decided to "unify" all of the flight support systems of the MSFN using only one set of radio frequencies so that only one antenna, transmitter and receiver system on board the spacecraft and on the ground could handle all ground to air communications.

The frequencies chosen were in the S-Band of the RF spectrum and hence the name Unified S-Band evolved.

This frequency, a power output of 20 kilowatts and large antennas provide a capability for support of the entire lunar mission.

The new USB System was designed to be readily integrated into existing basic MSFN stations without disrupting work that was in progress on Gemini.

The MILA USB Station is unique in that it is not only an operational station during the actual space mission, but also provides support to KSC and MSC during the long pre-launch test and checkout and launch periods.

For Apollo 7, Wiley White and George Jenkins, GSFC, are supporting Apollo 7 Test Supervisor Don Phillips from the MILA USB Launch Support Console. Helm and Lynch Berry, Bendix Corporation, will provide the support to the MSC Flight Director, Glen Lunney, from the MILA mission support console.

During this period the station also supports the MCC in the test, checkout and acceptance of operational computer "software" programs produced by GSFC for the MSFN and those produced by MSC for the MCC flight control facilities.

Since the USB System will be the only means of tracking and maintaining communications with the spacecraft, it is necessary prior to launch to assure that the MCC systems at MSC, MSFN systems at GSFC and the network stations and the flight systems in the spacecraft are compatible and sufficient to support the mission.

To accomplish this, certain KSC pre-launch integrated tests "marry" all of the mission support elements with those at KSC and the space vehicle on the pad.

In the final count, the MILA USB Station enters the worldwide network in support of MSC simultaneous with KSC.

During the mission, USB will handle continuous and simultaneous coverage of both the command and lunar modules.

The USB tracking and communications with the lunar module while it is on the moon will be provided by deep space facilities at Madrid, Spain; Canberra, Australia; and Goldstone, California, each employing 85-foot antennas.

The MILA USB Station and several other stations will use their 30-foot antennas for in-flight checkout of the spacecraft, to fill gaps in the coverage of the three lunar stations and to provide instrumentation coverage for checking the spacecraft in earth orbit.

Four land stations, MILA, Grand Bahama, Antigua, and Bermuda, and one instrumentation ship are required to provide continuous USB coverage from launch through insertion.

An additional seven land stations, Canary Islands; Texas; Guaymas, Mexico; Ascension Island; Carnarvon, Australia; Guam; and Hawaii, and two additional instrumentation ships are required to complete the USB system worldwide coverage requirements.

Also, the Apollo networks will include four ships and eight instrumented aircraft.



RELEASE NO: KSC-399-68
FOR RELEASE: Immediate

August 30, 1968

BOEING STUDIES TWO-STAGE VEHICLE FOR LAUNCH FROM KSC'S COMPLEX 39

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration has awarded a \$95,850 contract to the Boeing Company, Cocoa Beach, Florida, to study requirements to support the launching of a two-stage Saturn V rocket.

The configuration, called the Intermediate 20 vehicle, would be composed of the first and third stages of the three-stage Saturn V.

Saturn V is launched from Complex 39 of the Spaceport in the Apollo lunar landing program.

The study will explore modified or additional facilities, equipment and other resources needed to support the launch of an Intermediate 20 from Complex 39.

The Kennedy Space Center is responsible for assembly, checkout and launching of manned and unmanned spacecraft in NASA's program of space exploration.

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RELEASE NO: KSC-400-68

FOR RELEASE: Immediate

September 3, 1968

NASA EXTENDS CONTRACT WITH FEC

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration has extended for a second year a contract with Federal Electric Corporation, Paramus, New Jersey, for communications and instrumentation support at NASA's John F. Kennedy Space Center.

The basic contract is for five years, with annual renewals.

The extension, effective July 1, 1968, amounts to \$20,188,087 and brings the total value of the cost-plus-award-fee contract to \$35,962,005.

The Kennedy Space Center conducts manned and unmanned space launches and is responsible for development of launch facilities for the Apollo/Saturn manned lunar landing program.



RELEASE NO: KSC-401-68
FOR RELEASE: Sept. 4, 1968 A.M.'s

PUBLIC BUS TOURS AT SPACEPORT SHOW AN 18.5 PERCENT INCREASE

KENNEDY SPACE CENTER, Fla. -- The Center today reported an increase of 18.5 percent in the number of persons who took daily bus tours during the peak summer season of June through August 31.

There were 250,331 bus patrons this summer compared to 211,299 in the same months of 1967. To date this year, through August 31, 495,824 had toured the Spaceport and Cape Kennedy, or 23.2 percent, more than in the same period of 1967 when 402,531 persons enjoyed the tours.

Trans World Airlines operates the program for NASA, employing Greyhound as the subcontractor for the tours.

By months, the comparative figures are:

| | June | July | August |
|------|--------|--------|--------|
| 1967 | 54,848 | 78,074 | 78,377 |
| 1968 | 61,131 | 96,744 | 92,456 |

Since the daily tours began in July 1966, the Center program has accommodated 1,186,710 persons.



RELEASE NO. KSC-407-68

FOR RELEASE: Immediate

September 12, 1968

KSC SURVEYS FOOD SERVICE INDUSTRY

KENNEDY SPACE CENTER, Fla. -- The KSC Exchange Council, which operates all food services and vending at the center by contract, recently undertook an extensive market survey of the food industry.

All major industrial feeding companies were invited to submit proposals for providing these services for center employees. The survey was conducted to insure that the food operations at KSC would be up-to-date by inclusion of recent innovations in the food service industry, if feasible.

Study of the proposals showed that no major changes are necessary in present operations.

Automatic Retailers of America, the present contractor, will continue to operate the food service facilities and vending machines at KSC. ARA's present contract expires in April, 1972.



RELEASE NO: KSC-409-68 FOR RELEASE: Immediate

September 13, 1968

SOUTH BREVARD CHAMBER OF COMMERCE MEMBERS TOUR SPACEPORT AND CAPE

KENNEDY SPACE CENTER, Fla. -- About 45 members of the South Brevard Chamber of Commerce toured the Spaceport and Cape Kennedy today.

The group was composed chiefly of committee chairmen, committee members, and a few directors of the organization. The purpose of their tour was to familiarize them with the two space facilities so vital to the economy of the county.

In addition to the facilities on the Cape, they toured Launch Complex 39 where the giant Apollo/Saturn V space vehicles are assembled, checked and launched in America's program to land astronauts on the moon and return them safely to earth.



RELEASE NO:

KSC-414-68

FOR RELEASE:

Immediate

September 25, 1968

NOVEMBER I READINESS DATE SET FOR PAD B AT SPACEPORT

KENNEDY SPACE CENTER, Fla.--While most of the personnel at the Kennedy Space Center are geared to the upcoming Apollo 7 and 8 launches, the Launch Complex 39 Site Activation Office is working toward a November I readiness date for Pad B.

Pad B, located about two miles north of Pad A, is the scheduled launch site for the second manned Saturn V mission in the February-March period of 1969. This flight will be the first carrying all three segments of the spacecraft—the command, service, and lunar modules.

"Because of the similarity of Pad B to Pad A, and because of the progress made to date, we expect no significant delays in meeting Pad B's readiness date," said Lt. Col. D. R. Scheller, Chief of the LC-39 Site Activation Office.

"In effect, the two pads are interchangeable," said Scheller. "Additionally, support equipment, such as mobile launchers and the mobile service structure, can be used interchangeably at the two pads."

The basic brick and mortar work at Pad B was completed in the summer of 1966. Since then the installation and checkout of propellant, pneumatic, electrical, and other systems have been in progress.

The pad is shaped like an irregular octagon, approximately 3,000 feet across. It consists of a reinforced hardsite 48 feet above sea level, measuring 390 feet by 325 feet.

The Site Activation Office, organized to coordinate site activation requirements at LC-39 and to integrate the varied activities of scores of contractor personnel, is scheduled to be closed when its work at Pad B is completed.

Scheller, an active duty Air Force Officer detached to NASA since 1964, is scheduled to be transferred to an overseas Air Force installation next month. Other staff members include William L. Smith, Deputy Chief; William P. Deason, Project Engineer; A. E. Chauvin, Project Engineer, and Mrs. Barbara Fox, Secretary.

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PUBLIC INFORMATION OFFICE, AREA CODE 305-867-2468



RELEASE NO: KSC-415-68

FOR RELEASE: September 24, 1968

SPACESUIT LAB AT KSC SUPPORTS ASTRONAUTS

KENNEDY SPACE CENTER, Fla.—The term "PGA" is meaningful to golf fans, but to an astronaut or suit technician at Kennedy Space Center it means "pressure garment assembly," the multi-piece Apollo space suit.

A super-clean space suit laboratory is located on the third floor of the Manned Spacecraft Operations Building on KSC. The principal hardware in the laboratory is three multi-dial consoles known as the PGA test stand.

The PGA test stand allows technicians to perform and monitor spacesuit leak and contamination checks of spacesuits by pumping oxygen and compressed air from storage tanks through an umbilical to the garments.

The Manned Spacecraft Center's Crew Systems Resident Office at KSC operates the spacesuit laboratory, which supports all flight and training exercises involving suited astronauts.

Richard Mayo, Crew Systems Resident Office Chief, describes the lab as a cooperative endeavor involving civil service and contractor personnel, the latter employed by ILC Industries, Apollo spacesuit manufacturer. Thomas Parish is ILC Industries manager at KSC.

The lab must maintain nine suits for each mission's prime crew and six for the backup crew. Primes have two flight suits and one training suit and backups have one flight and one training suit.

Authorized persons enter the three-room laboratory through an airlock, a small room where they are required to don surgical gowns and quickly zip their shoes through a double-sided mechanical cleaning brush.

The lab's two major work areas are the repair and maintenance room and the main suiting area. Adjacent to the suiting room is a smaller ready room where astronauts put on their flight underwear and technicians attach biomedical sensors.

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While every astronaut has his own favorite suiting procedure, they all follow a basic plan designed to afford them maximum comfort, flexibility and safety.

Some astronauts, according to Joe Schmitt, veteran spacesuit technician of the Mercury and Gemini programs, prefer to sit on the edge of a chair while others stand when stepping into the legs of the 60-pound garment.

After the suit has been pulled to the waist by either dressing method, three connections are made between the suit and the astronaut — the urine collection device, biomedical sensor connection and, if worn, the liquid-cooled garment link.

Space pilots who will be performing extravehicular activity and those who will explore the lunar surface, will wear liquid-cooled garments under their spacesuits.

Liquid-cooled garments consist of a continuous network of tubing which stretches to all of the body's extremities, rejecting waste heat through a water sublimator in the astronaut's portable life support system.

These versatile suits will protect persons against extreme cold and heat, varying as much as plus or minus 250 degrees F. on the lunar surface.

After the suit is slipped over the shoulders in coverall fashion, it is zipped, and a biomedical instrument check determines whether the body sensors were disturbed during suiting up.

Technicians then hook up the PGA test stand umbilical to the spacesuit intake and outlet gas connectors. During actual preflight activity, oxygen usually is flowed to the suit, and compressed air is used for non-flight suiting.

Next, a communications carrier containing two earphones and two microphones wired redundantly to afford a reliable backup system is placed on the astronaut's head.

The latex gloves are put over an optional comfort nylon glove. An abrasive covering protects the latex glove's fingers against punctures and other mishaps.

Spacesuit boots are attached to the garment and go on during preliminary suiting.

A polycarbonate helmet resembling a transparent plastic dome is placed over the astronaut's head, completing major suiting and paving the way for final checkout.

Technicians verify that all suit fittings are secure, conduct communications checks and perform the "Delta P" or back pressure check of the suit to find out whether the garment's interior venting system was displaced during dressing.

Pressure decay and leakage checks using the PGA test stand are conducted, followed by an analysis of suit oxygen which also will determine if nitrogen has been purged from the garment.

The umbilical linking the PGA test stand and the astronaut's spacesuit is disconnected, and the suit operates from a Portable Oxygen Ventilator.

This methodical pace during the 35-minute suiting session ticks off to the accompaniment of a mission countdown clock prominently displayed on a wall.

The suit technician's responsibilities do not end in the lab. He joins the astronaut in the Transfer Van to the launch pad and helps him into the Apollo spacecraft, hooking up environmental control system hoses, communications systems and restraint harnesses.



RELEASE NO:

KSC-416-68

FOR RELEASE: Immediate

September 27, 1968

KENNEDY SPACE CENTER CONTRACT RECEIVED BY RHODE ISLAND FIRM

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration has awarded a \$30,137 contract to Kaiser Aluminum & Chemical Sales, Inc. of Bristol, Rhode Island, for electrical cable to be used at the John F. Kennedy Space Center.

The special purpose cable is for Saturn ground service equipment at Launch Complex 39 in direct support of the Apollo 8 mission scheduled in December.

The Center is responsible for assembly, checkout, and launch of Apollo/Saturn space vehicles used by NASA in the program to land astronauts on the moon and return them safely to earth.

PUBLIC INFORMATION OFFICE, AREA CODE 305-867-2468

KSC FORM OT-884 (7/68) (ONETIME FORM - REPRINT NOT AUTHORIZED)



RELEASE NO: KSC-418-68
FOR RELEASE:

Release: 3:00 p.m. October 2, 1968

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NASA EXTENDS CHRYSLER CONTRACT

KENNEDY SPACE CENTER, Fla.—The National Aeronautics and Space Administration has awarded Chrysler Corporation Space Division of New Orleans, La., a \$10,545,753 contract extension.

The contract covers the necessary manpower and material to provide design engineering, sustaining engineering, modification, testing, refurbishing, provisioning for launch support of Kennedy Space Center designed equipment and launch operations support for the Saturn IB launch vehicle.

All work done under the cost-plus-award-fee extension will be accomplished at NASA's Kennedy Space Center and adjacent Cape Kennedy where the Saturn IB is launched.

The extension covers a period from July 1, 1968 through December 31, 1968. The original contract, in the amount of \$77,877,486, concluded on June 30 of this year.

Kennedy Space Center launches both manned and unmanned satellites and probes from its facilities on Merritt Island and adjacent Cape Kennedy. The Center has assembly, checkout, and launch responsibilities for all Saturn IB and Saturn V Apollo missions.



RELEASE NO: KSC-463-68 FOR RELEASE: Immediate

October 15, 1968

KENNEDY SPACE CENTER, FLA. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center is suspending launch operations at its Launch Complexes 34 and 37 until the beginning of the Apollo Applications Program late in 1970.

The effect on the contractor work force at KSC of deactivation of Saturn 1B Launch Complexes 34 and 37 and related adjustments currently underway is expected to be a reduction of 1,315 personnel. Another 1,000 personnel may be assigned by their contractors to work on the accelerated Saturn V activities at Complex 39.

This will result in a work force reduction of about six percent at KSC by January 1969. Exact manning levels are being negotiated with the affected contractors.

The work force on the Apollo program which reached a peak of 300,000 has been reduced over the past year and a half at a rate of about 4,000 to 5,000 per month.

The phasedown of the two Saturn 1B launch complexes follows the successful launch of Apollo 7 from Complex 34 October 11 to complete the use of the Saturn 1B in the Apollo program. All subsequent Apollo missions will utilize the Saturn V vehicle which will be launched from Complex 39.

The support of Complexes 34 and 37 will permit orderly reactivation from a standby status for the Apollo Applications Program and may result in an employment increase at these complexes following the manned lunar landing. The work increase could occur as early as the Fall of 1970.

Of the NASA contractors affected by the close down, Chrysler Corporation will be most heavily impacted. Chrysler builds the first, or booster stage of the Saturn 1B vehicle and is engaged here in checkout and preparation for launch, as well as design engineering work related to Complexes 34 and 37.

Other NASA contractors whose staffing will also be affected include Catalytic Dow, Federal Electric Corp., General Electric Col, McDonnell Douglas Corp., North American Rockwell Corp., Bendix Corp., International Business Machines Corp. and Grumman Aircraft Engineering Corp.

These contractors prepare Saturn 1B stages, or Apollo spacecraft, for launch or provide support services on both complexes.

Eastern Test Range support of NASA operations at 34 and 37 will also be curtailed.

Those reductions are in addition to previously announced reductions in requirements for engineering design and support for the Center. They result from delayed inception of Apollo Applications launch operations, required by budgetary constraints, and are coupled with a current NASA-wide cost reduction effort.

Complexes 34 and 37 were designed and built by NASA for the Saturn 1 and 1B vehicles. Complex 39 was developed for the Saturn V launch vehicle, the only one capable of transporting men to the moon and back.



RELEASE NO: KSC-466-68
FOR RELEASE: Immediate

October 22, 1968

SPACEPORT SCHEDULES OPEN HOUSE FOR EMPLOYEE FAMILIES SATURDAY, OCTOBER 26, 1968

KENNEDY SPACE CENTER, Fla. - - Family members of thousands of Center badged personnel will visit KSC launch complexes and installations at the Spaceport and Cape Kennedy Air Force Station, Saturday, as KSC holds an open house for employee family members.

The open house, postponed from October 19 as Hurricane Gladys threatened the area, marks the 10th anniversary of the establishment of NASA.

KSC launch complexes and installations at Cape Kennedy and the Spaceport, including the Vehicle Assembly Building, the KSC Visitor Information Center, and the Air Force museum will be open for the occasion.

With the prospect of families of thousands of KSC's 25,000 government and contractor employees attending, the open house is not available to the public. However, NASA Tours will be in operation to accommodate the public during the open house.

Access for family members of KSC government and contractor employees will be limited to those accompanied by a badged employee. The Cape Kennedy south gate and KSC gates 2, 3, and 4 will be open for family access. Gates will be open from $9 \, a.m.$ to $4 \, p.m.$



RELEASE NO: KSC-473-68
FOR RELEASE: Immediate

October 29, 1968

COMMUTING TRAFFIC PATTERNS CHANGE AT KSC

KENNEDY SPACE CENTER, Fla., -- Some changes in commuting traffic patterns became evident today in the most recent electronic counts of vehicles entering and leaving the NASA installation and Cape Kennedy Air Force Station in a 24-hour period.

The flow in and out of Gate I, South gate of Cape Kennedy, amounted to 21,644 vehicles on October IO compared to 19,800 in July and 20,334 in January, 1968.

A sharp increase was noted at Gate 3, located on the NASA Causeway connecting KSC with the Florida mainland. Here the tally was 16,699 compared to 13,940 in July and 10,695 in January.

While the movement via Gate 2, on SR 3, Merritt Island, increased over July, the percentage hike was not as high as at Gate 3. At Gate 2, 10,064 cars entered and left the Center compared to 8,546 in July and 9,052 in January.

Gate 4, located on the approach via the Titusville Causeway over the Indian River, clocked 6,920 in one October day compared with 7,059 in July and 5,054 in January.

Gate 4TB on Kennedy Parkway north of the Vehicle Assembly Building registered 4,725 cars compared with 5,062 in July and 5,378 in January.

The daily volume at all access gates has reached 60,000 vehicles.



RELEASE NO:

KSC-475-68

FOR RELEASE:

Immediate

October 30, 1968

CITRUS COMMISSION REPRESENTATIVES TOUR KENNEDY SPACE CENTER

KENNEDY SPACE CENTER, Fla., -- Sales representatives of the Florida Citrus Commission who are attending a sales meeting at Cape Canaveral this week toured the Spaceport and Cape Kennedy today.

Nearly 100 representatives, accompanied by Commission Chairman O. D. Huff and Key Scales, advertising committee chairman, viewed the National Aeronautics and Space Administration's facilities at the Spaceport and on the Cape.

The group is holding its meeting at the Cape Kennedy Hilton hotel.

On Cape Kennedy they visited Launch Complex 17 where two NASA spacecraft -- Pioneer D and an Intelsat -- are being prepared for launch aboard Delta vehicles.

They also viewed Launch Complex 36 where an Orbiting Astronomical Observatory and a Mariner Mars spacecraft are to be launched aboard Atlas/Centaur rockets.

At Launch Complex 39 of the Kennedy Space Center, they saw the giant Apollo 8 space vehicle on its launch pad, being prepared for a manned mission in December.

They also toured the rest of Complex 39, including the Vehicle Assembly Building and Launch Control Center.



RELEASE NO.

KSC-500-68

FOR RELEASE:

Immediate

November 23, 1968

LUNAR MODULE EXHIBIT TO JOHNSON LIBRARY

KENNEDY SPACE CENTER, FLA. -- In presenting to Mrs. Lyndon B. Johnson the model of the lunar module to be exhibited in the Johnson Library in Austin, Texas, Dr. Thomas O. Paine, Acting NASA Administrator said the following:

To Commemorate

- -- man's entry into outer space to seek new knowledge and a greater understanding of the universe,
- -- America's historic Apollo program that will send astronauts to the moon and back.
- -- and Lyndon B. Johnson's vision and leadership at each crucial step forward from 1957 to 1970,

his grateful fellow workers in the National Aeronautics and Space Administration present a model of the Apollo Lunar Landing Module for display in the Lyndon B. Johnson Presidential Library. When the model is delivered to the Johnson Library it will bear a plaque listing chronologically a few of the many contributions to our space program of Lyndon B. Johnson -- as Senate Majority Leader, as Chairman of the Senate Aeronautics and Space Sciences Committee, as Chairman of the National Aeronautics and Space Council when he was Vice President, and then as President of the United States:

- 1957 -- Senator Johnson led the Senate Preparedness Subcommittee in investigating America's lag and identifying America's needs in space.
- 1958 -- Senator Johnson led the fight in Congress for passage of the National Aeronautics and Space Act which established NASA and assured that the United States space effort would meet both civilian and military needs.
- 1958 -- Senator Johnson, as emissary of President Eisenhower, first stated to the United Nations General Assembly the United States policy of seeking international cooperation in the peaceful uses of outer space for the benefit of all mankind.

- MOTE PUBLIC INFORMATION OFFICE, AREA CODE 305-867-2468

KSC FORM OT-384 (7/68) (ONETIME FORM - REPRINT NOT AUTHORIZED

- 1961 -- Vice President Johnson was designated Chairman of the re-vitalized National Aeronautics and Space Council and assigned a position of leadership and responsibility for space programs in the Kennedy Administration.
- 1961 -- Vice President Johnson played a vital role in planning and carrying out rapid increases in U. S. booster strength and in initiating the Apollo program.
- 1961 -- Vice President Johnson backed the decisions to initiate manned flights in the Mercury program and to start the more ambitious Gemini program, leading to 16 successful manned flights, a vast increase in U. S. space flight experience, and many new performance records for men and machines in space.
- 1962 -- Congress passed the Communications Satellite Act, following closely the national policy developed by the National Aeronautics and Space Council under Vice President Johnson's leadership.
- 1963 -- Vice President Johnson participated actively in the nationwide debate on the Apollo program, stressing its unique contributions to U. S. security and progress and urging continued strong support in Congress.
- 1964 -- President Johnson, in his first State of the Union message, reaffirmed U. S. space policy in these words: "...we must assure our pre-eminence in the peaceful exploration of outer space, focusing on an expedition to the moon in this decade -- in cooperation with other powers if possible, alone if necessary."
- 1965 -- In White House ceremonies hailing success of Mariner 4's photographic mission to Mars, President Johnson stressed the space program's contributions to the cause of world peace, and added this word of caution: "It may be -- it may just be that life as we know it with its humanity is more unique than many have thought, and we must remember this."
- 1966 -- Consistent with this concern for the preciousness of life on earth in the nuclear era, the United States made a determined and successful effort to negotiate with the Soviet Union and other powers a treaty banding weapons of mass destruction on the moon and in orbit around the earth. This treaty was signed by President Johnson in January 1967.

- 1967 -- President Johnson asked Congress for substantial funding for important new programs to use the new space capabilities being developed and to maintain U. S. space leadership in the next decade.
- 1968 -- As the Apollo program and other NASA programs for the decade of the Sixties moved rapidly toward completion, President Johnson urged again that America "must be first" in space.

Mrs. Johnson, we trust that this model of the lunar module will signify to the many visitors to the Lyndon B. Johnson Presidential Library the President's vision and leadership that has carried this nation outward into the new ocean of space.



news release

RELEASE NO:

KSC-595-68

FOR RELEASE: Immediate

December 24, 1968

NEW SPACEPORT FACILITIES CONSTRUCTED IN 1968

With most major construction completed at the Kennedy Space Center, emphasis shifted in 1968 to modifying existing facilities and initiating new changes for assembling, checking out and launching Apollo/Saturn V space vehicles.

Design Engineering has supervised these modifications, which included manrating some support facilities in areas ranging from Launch Complex 39 to the Industrial Area.

At LC-39, extensible platforms have been activated within the Vehicle Assembly Building's High Bay 3 to support checkout of the Lunar Module 3 spacecraft, scheduled to be carried on Apollo 9.

High Bay 2 has been activated and is supporting assembly of the Apollo 10 space vehicle.

Towers A and B, on the western side of the VAB are occupied by administrative and technical support personnel.

Three Radio Frequency and Communications Rooms, nearing completion on the 29th Floor of Tower E, link Bays 1, 2 and 3 with remote facilities at the pad and the Industrial Area.

Instantaneous fire deluge systems were installed on all movable work platforms within the VAB's three bays.

Other improvements at LC-39 include:

Protective overlays added to the VAB and LCC roofs;

Crawlerway surfacing was extended to Bay 2 on the western side of the VAB; and

Security fencing now encloses the VAB, mobile launcher refurbishing area and the transporter parking area.

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PUBLIC INFORMATION OFFICE, AREA CODE 305-867-2468

Additional LC-39 improvements include:

Protective covering for electrical interfacing between the Mobile Service Structure and Pads A and B for launch environment;

An addition to the Acceptance Checkout Equipment (ACE) room on the service structure's minus 22-foot level;

Modification of the service structure and mobile launcher firex systems, including Spacecraft Lunar Module Adapter and Launch Escape System deluge and cooling;

Clearing of areas around Pads A and B for spacecraft land impact; and installation of environmental control systems in the Emergency Egress Rooms beneath Pads A and B.

In the Spacecraft Industrial Area, more than 300 modifications were made to the Manned Spacecraft Operations Building's manned spacecraft checkout area.

Included were some 100 changes in the altitude chambers' electrical and mechanical interfaces.

The MSO's high and low bays were transformed into limited access areas.

Two additional ACE stations in the MSO were activated in 1968, bringing the total to six in that building.

The major modification in the Industrial Area during 1968 was addition of east and west wings to the Headquarters Building.

In conjunction with the 120,000-square-foot addition to the Headquarters Building, a new parking lot for 300 cars was completed behind the west wing.

The new and larger Occupational Health Facility was added.

Fire alarm systems were modified throughout the Industrial Area and new smokesensitive detectors installed.

A 1,600-foot-addition was made to the Central Telephone Office to house 500 new main lines.

At NASA facilities on Cape Kennedy: The service structure at LC-17A was raised fourteen-and-one-half-feet to accommodate the new long-tank Delta space vehicle. Similar modification will begin next year at 17B.

Saturn launch complexes 34 and 37 have been secured.

A nitrogen gas generating and distribution system was installed on both pads at LC-36.

An annex to Hanger S was completed for a work and primate quarantine area in support of the Biosatellite program.



news release

RELEASE NO: KSC-596-68 FOR RELEASE: Immediate

December 24, 1968

1968 SUCCESSFUL YEAR FOR LAUNCHES BY KSC

KENNEDY SPACE CENTER, Fla. - - The flight of <u>Apollo 8</u> capped a year of successful space launches accomplished by the John F. Kennedy Space Center, NASA.

The 36-story high Saturn/Apollo space vehicle lifted off at 7:51 a.m. Dec. 21. It propelled astronauts Frank Borman, James A. Lovell and William A. Anders toward a lunar rendezvous 220,000 miles in space.

"The Apollo 8 mission at this point has been a perfect mission," said Lt. Gen. Samuel Phillips, Apollo Program Director.

The spacecraft carrying the first men to see another body in space at close range will splashdown in the Pacific Ocean south of Hawaii on Dec. 27.

Another manned space flight set the stage for the unprecendented events of late December.

The Apollo 7 mission, Oct. 11 to Oct. 22, marked the first manned flight of the lunar landing program. The spacecraft lifted off atop a Saturn IB rocket from Cape Kennedy. Crewmen were astronauts Walter Schirra, Donn Eisele and Walter Cunningham.

Referring to Apollo 7, Rocco Petrone, Director of Launch Operations at KSC, said that "an excellent launch performance led to what has been described as a 101 percent mission."

There were two other Apollo missions in 1968. The Apollo 6 flight April 4 was the second unmanned test of the Apollo-Saturn V space vehicle. A lunar module was tested during an unmanned orbital flight aboard a Saturn IB rocket Jan. 22. This was Apollo 5.

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The lunar module is the vehicle which astronauts will use to land on and liftoff from the moon. It will be tested in space by astronauts during the flight of Apollo 9, early in 1969.

The year 1968 began for KSC with the successful launch of Surveyor VII by a Centaur Rocket, Jan. 7. The last unmanned spacecraft in the Surveyor series soft-landed on the moon, returned thousands of photos to earth, and performed other experiments. The five successful Surveyor spacecraft returned 89,000 photographs from the lunar surface, helping pave the way for a future landing by American astronauts.

On Dec. 7, Centaur placed an Orbiting Astronomical Observatory in orbit. The scientific satellite carries cameras, telescopes and other equipment to map new stars and define the chemical makeup of stellar objects.

There were three Delta launches from KSC complexes on the Cape in 1968.

The Highly Eccentric Orbit Satellite, HEOS-1, was placed in orbit Dec. 5. HEOS is owned by the European Space Research Organization.

Scientists and engineers representing 10 European nations and the U.S. took part in the HEOS launch. The satellite is studying cosmic rays and other phenomena.

A communications satellite, INTELSAT III, was placed in orbit by a Delta vehicle Dec. 19. Operated by the Communications Satellite Corporation, INTELSAT can transmit 1,200 voice channels or four color television channels simultaneously.

On Nov. 8, a Delta vehicle injected Pioneer 9 into an orbit around the sun. The Pioneer Spacecraft is designed to provide data on the properties of solar wind and interplanetary magnetic fields.

The final Atlas-Agena launch by NASA from Complex 13 took place March 13, when an Orbiting Geophysical Observatory was placed in orbit. The satellite contains a variety of experiments and instruments, including radiation and ionization counters, for geophysical research.

Kennedy Space Center also conducts launches at the Western Test Range in California. There were two successful launches there in 1968, both with the Delta vehicle.

Explorer XXXVIII, placed in orbit July 4, is designed to measure radio noise sources. A TIROS weather satellite, orbited Dec. 15, became part of the U.S. operational, world-wide weather analysis network.

There were 12 successful launches from Kennedy Space Center, and the Western Test Range. There were two failures, one with a Delta vehicle carrying a communications satellite, one with a Centaur carrying an applications technology satellite. A failure at the Western Test Range involved a Nimbus weather satellite atop a Thor-Agena launch vehicle.



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RELEASE NO:

KSC-19-69 FOR RELEASE: Immediate

January 22, 1969

26 LAUNCHES ANNOUNCED FOR 1969

KENNEDY SPACE CENTER, Fla. - - An Orbiting Solar Observatory satellite launched January 22 will begin a busy year for Kennedy Space Center which includes the launch of astronauts to a landing on the moon and return.

Five manned space missions are planned to begin from the Spaceport in 1969. The Space Center will also launch 13 unmanned scientific missions from Cape Kennedy, and eight from the Western Test Range in California.

The manned launches will begin with Apollo 9, scheduled February 28. A prime objective of the earth orbital flight is to test the lunar module, the space ferry which will be used to land Americans on the moon. Crewmen are James A. McDivitt, commander; David R. Scott, command module pilot; and Russell L. Schweickart, lunar module pilot.

Apollo 10, in the second quarter of this year, will place an astronaut crew in lunar orbit. Two of the astronauts will fly their lunar module to within 50,000 feet of the moon's surface. Apollo 10 crewmen are Thomas P. Stafford, commander; John W. Young, command module pilot; and Eugene A. Cernan, lunar module pilot.

Apollo 11, to be launched later in 1969, is designated as the first lunar landing mission. The two astronauts who land on the moon will collect samples of the lunar surface and leave data-collection instruments. Neil A. Armstrong commands the Apollo 11 spacecraft. The command module pilot is Michael Collins, and the lunar module pilot is Edwin A. Aldrin Jr.

If the first lunar landing mission is successful, two other landings are planned in 1969. Astronauts would explore the moon's surface, leave instrument packages and conduct experiments.

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Five launches are scheduled at NASA complexes on Cape Kennedy in the January-March time period. The Orbiting Solar Observatory will observe the sun from a 350-mile circular orbit. Intelsat III, February 5, also launched by a Delta vehicle, is a commercial communications satellite capable of transmitting television pictures and voice between continents.

February 23 is the earliest date for launching a Mariner spacecraft toward Mars. A second Mariner-Mars spacecraft is to be launched March 24. Both spacecraft will fly by the planet, sending back data on its atmosphere and surface. Mariner spacecraft are launched by the Centaur rocket.

A TIROS weather satellite will be launched during the first quarter of 1969 by a Delta rocket.

Three more Delta missions will originate here during the April-June period.

A Biosatellite, with a mentailed monkey as its passenger, will provide data on prolonged space flight during a 30-day earth orbital mission. Intelsat III is another in the enlarging network of commercial communications satellites. Pioneer E will be placed in orbit around the sun to gather information on magnetism, solar energy and other phenomena.

Three launches are scheduled in the third quarter of this year.

The Applications Technology Satellite to be orbited by a Centaur vehicle is a multi-purpose craft which will gather data on the weather, relay communications, and supply information about conditions on the earth's surface.

Delta vehicles will place two unmanned craft in orbit, an Orbiting Solar Observatory and a communications satellite for the United Kingdom.

Two launches are planned in the last quarter of 1969. An Orbiting Astronomical Observatory placed in orbit by a Centaur vehicle will measure ultraviolet rays and stellar energy. The second launch of a communications satellite for the United Kingdom is scheduled.

Eight launches are planned from the Western Test Range in 1969, five with Delta vehicles and three with Thor-Agena rockets.

Three TIROS weather satellites will be launched by Delta vehicles, along with an Explorer satellite designed to measure cosmic rays and other properties in outer space. ISIS, a Canadian-built satellite intended to supply data on particles found in high earth orbit, will also be launched by a Delta rocket.

A Nimbus weather satellite will be placed in orbit by a Thor-Agena vehicle. A second mission with this rocket is the launch of an Orbiting Geophysical Observatory, instrumented to observe properties of the earth's atmosphere.

The third Thor-Agena mission is to test an ion-thruster, an experimental engine which may power interplanetary spacecraft in future years.



news release

RELEASE NO: KSC-459-69
FOR RELEASE: November 1969

SPACE INVESTMENT RETURNS GREAT DIVIDENDS

KENNEDY SPACE CENTER, Fla., -- Man's first steps on the Moon during the Apollo 11 mission last July marked the realization of an ancient dream.

Acclaimed around the world as a great historical and technological feat, the lunar exploration program's returns in scientific knowledge and national prestige remain to be fully assessed.

The nation's returns from its space investment are marked in more tangible and enduring forms than the headlines and ticker tape parades which followed man's first visit to another celestial body.

Communications satellites link the world's continents and their three billion inhabitants, weather satellites provide warnings of storms potentially dangerous to human life and property. And photographs from space have provided clues leading to the discovery and development of previously unsuspected sources of mineral and other natural resources.

The technological stimulus is great and techniques and devices developed for space exploration are finding their way into the nation's economy as a result of the NASA Technology Utilization Program.

"Since the establishment of KSC's Technology Utilization Program early in 1966," reports James T. Harrell, KSC Patent Counsel and Technology Utilization Officer, "620 items of new technology have been documented as the result of in-house (NASA) and contractor activities.

"At the present time, innovations are being made here at KSC at the average rate of one for every workday," said Harrell.

An estimated 1,000 inquiries from non-aerospace companies located in 38 different states have been answered on new technology items, according to Harrell. Many of them benefitted substantially from local techniques and know-how.

"For example," said Harrell, " four different firms are now using a local management technique - called Vis-A-Plan - for tracking project events on a performance - time basis."

On a national basis, space activity is a forcing function in nine broad areas of technological innovation which the U.S. Department of Labor expects will have the greatest impact on future society.

These include the computerization of data processing; advanced instrumentation and process control; increased mechanization; progress in communications; advances in metal-working operations; developments in energy and power; new materials, produces and processes; and managerial techniques.

More than 3,000 items of new technology generated by the civilian space effort have been reported to the industrial, education and business communities through the NASA-wide Technology Utilization Program.

These communities bought 500,000 Tech Briefs describing such innovations in 1968 alone. Nearly 500 fee-paying industrial clients use the search-and-retrieval services of the TU Program's six dissemination centers.

Here are some samples of space-developed devices and techniques being adapted to non-space uses:

FUEL CELL - The fuel cell, which had lain dormant for many years, was put to use to supply electrical power for spacecraft. Twenty-eight natural gas companies now have a \$20 million program for adaptation of the fuel cell for home power units.

MINIATURE TV CAMERA - A TV camera measuring only four inches by three inches by one and one-half inches was developed to observe Saturn stage separation during Apollo flights. Powered by batteries and weighing only 16 ounces, the camera is now on the commercial market.

TREMOR SENSOR - A sensor designed to count meteorite hits on a spacecraft is the basis of an instrument that, by measuring muscle tremors, may help doctors in early detection of a number of neurological ailments, including Parkinson's disease.

TEXTILES AND FABRICS - Research on clothing able to withstand the Moon's 250 degree heat and minus 240 degree cold should lead to suits which are lightweight, strong and corrosion resistant. Not impossible is thermo-electrical weave, which could replace bulky topcoats with a built-in automatic temperature control system. Brassiere manufacturers are giving American women a more comfortable uplift through a laminating technique invented to produce spacesuits.

PORTABLE PLANETARIUM - This novel educational device, now on the market, permits a student virtually at a glance to determine the relative positions of the planets on any given day between the years 1900 and 2000.

SOLAR CELLS - The prime source of electrical power for unmanned satellites and space probes, solar cells are now finding practical uses here on Earth. One example is their use to power the emergency radiotelephone system now in operation in California for stranded motorists.

UNDERSEAS PINGER - This device, originally developed to locate submerged space capsules and test rockets has been used to plot ocean currents and trace the movements of fish. Now being manufactured by two companies, the device was voted one of 1968's best 100 inventions.

These are only a few examples of the adaptation of space developed devices and techniques to uses outside the space program, applications which will play a major role in retaining the United States' world leadership in technological and scientific progress.



néws release

RELEASE NO: KSC-464-69 FOR RELEASE: November 12, 1969

SIEPERT TO LEAVE KSC

KENNEDY SPACE CENTER, Fla., -- Albert F. Siepert, the Deputy Director, Center Management, is leaving the Kennedy Space Center about December 1, 1969, to become a Program Associate at the University of Michigan's Institute for Social Research. He will be the Project Manager for a large scale organizational research study which involves, and is sponsored by, the General Motors Corporation.

Announcing Mr. Siepert's action today, Dr. Kurt H. Debus, Center Director, commended his Deputy for outstanding service to the national space program from its inception in October, 1958,to the present, and for successful management contributions throughout a career in the Federal service which began in 1937.

Mr. Siepert has worked closely with Dr. Debus since 1963 when he came to Florida as his immediate Deputy. His primary responsibility in this Center involved the development of organizational and management structures as KSC grew from about 2,500 to 26,500 personnel in September, 1968.

Mr. Siepert played key roles in the integration within KSC of the several launch teams which formerly operated here under management of the Marshall Space Flight Center, the Goddard Space Flight Center and the Manned Spacecraft Center. For this contribution, NASA last year conferred upon Mr. Siepert its Exceptional Service Medal. In October, 1969, after the Apollo manned lunar landing has been achieved, NASA also awarded him its highest recognition, the Distinguished Service Medal.

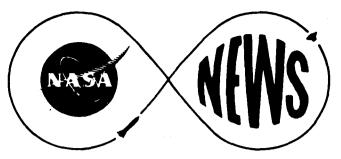
While residing in Brevard County, Mr. Siepert took active part in formulating KSC's relationship with the community and the State of Florida. He served on the Merritt Island Library Board and was an advisor to the Florida Technological University during the period of its organization.

Before joining NASA in 1958, he was executive officer of the National Institutes of Health, the Federal Government's largest medical research facility. In 1959 he was NASA's chief negotiator in arranging transfer of the Army rocket development team and its facilities from the military to NASA. This included the staff and resources of the Missile Firing Laboratory directed by Dr. Debus which became the nucleus of the Kennedy Space Center.

Mr. Siepert is a graduate of Bradley University and pursued graduate study in public administration at American University. An authority on research and development management, Mr. Siepert has contributed to four books dealing with this subject.

He received Bradley's Distinguished Alumnus Award in 1960. He also received the Distinguished Service Award of the Department of Health, Education and Welfare, in 1955, and the Arthur Fleming Award in 1950.

Mr. and Mrs. Siepert now reside at 1125 Carrigan Boulevard, Merritt Island. They will make their new home in Ann Arbor, Michigan.



Ben E. McCarty 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

> FOR RELEASE: Friday, December 17, 1971 Release # KSC-270-71

TWO MAJOR NASA APPOINTMENTS MADE AT SPACEPORT IN 1971

KENNEDY SPACE CENTER, Fla.—Two major appointments marked National Aeronautics and Space Administration personnel changes at the Kennedy Space Center during the past year.

In June, Robert C. Hock was appointed Manager of Apollo-Skylab Programs. Serving as Deputy Manager from the time the Apollo and Skylab Program Offices were combined in June of 1970, he succeeded Brigadier General Thomas W. Morgan, USAF, who was appointed Vice Commander, Air Force Space and Missiel Systems Organization.

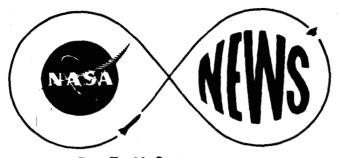
As Manager, Hock is responsible for KSC planning to meet Apollo and Skylab program requirements and serves as the primary point of interface for Apollo and Skylab program functions with the Office of Manned Space Flight and other Manned Space Flight Centers.

He joined NASA in May 1966, as Chief of the KSC Advanced Programs office following his retirement from the Air Force with the rank of Lieutenant Colonel.

Also in June, Edward F. Parry was appointed Deputy Chief Counsel to the Kennedy Space Center.

He serves as Deputy to KSC Chief Counsel John O' Brien.

Parry joined NASA as an attorney in the Office of the Chief Counsel at the Manned Spacecraft Center in April 1962.



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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

> FOR RELEASE: December 17, 1971 Release # KSC-273-71

APOLLO SPACECRAFT MOCKUP MOVED TO KSC VISITOR INFORMATION CENTER

KENNEDY SPACE CENTER, Fla.--A full-size dummy spacecraft used to check out assembly and test facilities for early Apollo missions has been placed on temporary display at the Spaceport's Visitor Information Center.

Known as the Spacecraft Facility Verification Vehicle (S/C FVV), the 26-meter-tall (82-foot-tall) Apollo mockup was moved Thursday from the Vehicle Assembly Building (VAB) where it has been stored. At the VAB it was held as a backup for a sturdier, more sophisticated test vehicle designated as Boilerplate 30.

Early in the Apollo Program, the S/C FVV was used extensively at both the Manned Spacecraft Operations Building and the VAB. At both locations, it was utilized to check out spacecraft handling procedures, to establish a fit-check of all ground support equipment, to verify documentation for components and to serve as an aid in training personnel. Its use permitted correction of discrepancies prior to the assembly, test and checkout of actual spacecraft.

In outward appearance, the S/C FVV very closely resembles the spacecraft for which it doubled. At its base, a tapered spacecraft lunar module adapter supports the cylindrical service module, which in turn is attached to the cone-shaped command module. Atop the command module is the launch escape system.

The S/C FVV arrived at the Spaceport in mid-April 1965 after a trip from the Marshall Space Flight Center, Alabama, where it had been utilized to support space vehicle mockup testing. At KSC, the S/C FVV was used initially at Launch Complex 34 to fit-check AS-201, a Saturn IB which was launched Feb. 26, 1966, with an unmanned Apollo command-service module.

Later the S/C FVV was used for checking out AS-500F, the full-scale Apollo/Saturn mockup used to train launch crews and check launch facilities. It was also used for Apollo 4, the first Apollo/Saturn V launched, plus Apollo 6 and the initial testing on Apollo 8.

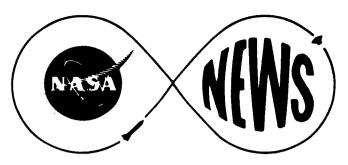
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At the VIC, the S/C FVV is installed outdoors along with other space hardware, including Juno 2 and Jupiter C rockets and a Gemini Titan space vehicle. In the same area are a Mercury spacecraft, a full-scale Apollo Lunar Module mockup and three types of rocket engines.

A full-scale model of the Lunar Roving Vehicle which carried Apollo 15 astronauts over the lunar surface is scheduled to be added to the outdoor display on December 18. It will remain at the VIC for several weeks except for a two-day period when it will be removed to appear at the Orange Bowl game.

Among new indoor exhibits recently added at the VIC are a scale model of the Mariner 9 spacecraft currently orbiting Mars and scale models of proposed space shuttle vehicles.

The VIC is open to the public every day of the year except Christmas.



Ben E. McCarty 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

> FOR RELEASE: Wednesday, December 29, 1971 Release # KSC-278-71

APOLLO, MARINER LAUNCHES HIGHLIGHT 1971 AT SPACEPORT

KENNEDY SPACE CENTER, Fla.—Two highly successful Apollo lunar visits were highlights resulting from launch activity at the Kennedy Space Center (KSC) during 1971.

Sharing the spotlight with the Apollo Missions was a productive Mariner 9 orbital probe of Earth's planetary neighbor, Mars – the first such placement of an Earth spacecraft into an orbit around another planet.

KSC's Unmanned Launch Operations launched three missions using the Delta vehicle and four using an Atlas-Centaur vehicle, including the Mars probe from Cape Kennedy. Two additional blast-offs occurred from the Western Test Range during the past year.

The Apollo 14 lunar mission was extremely productive as the astronauts used a two-wheel modularized equipment transport (MET), a golf-cart-like device, to aid in transportation of experiments to appointed positions as well as to facilitate the gathering of lunar rock samples.

Lunar surface travel became sophisticated during the Apollo 15 Mission with the successful depositing on the Moon of the Lunar Roving Vehicle (LRV).

The four- wheeled, wire-mesh-wheeled vehicle ("rover"), resembling a stripped-down dune buggy, was able to carry about 454 kilograms (1,000 pounds) Earth weight at speeds up to 12.9 kilometers (eight miles) per hour. The battery-powered vehicle traversed 28.2 kilometers ($17\frac{1}{2}$ miles) of lunar acreage before being abandoned when the astronauts left the Moon's surface.

The Mar's probe, Mariner 9, left Earth on May 30, arriving at the red planet on November 13, ahead of schedule.

Entering orbit around Mars, Mariner 9 transmitted to Earth pictures of a violent planet-wide dust storm whose upper extent was 9.6 to 11.3 kilometers (six to seven miles) above the Martian surface. The storm obscured virtually every surface feature.

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Mariner 9 continues to function. It is hoped the storm eventually will abate and Mission photography objectives may be attained.

Chronologically, 1971 KSC launches were as follows:

January 25 - Placement into orbit of Intelsat IV-F-2, first in a new series of global communications satellites from Cape Kennedy by the Unmanned Launch Operations Directorate. The satellite forms part of a global communication, commercial satellite system. The spacecraft, placed in orbit by an Atlas-Centaur vehicle, is owned and operated by Communications Satellite Corporation (COMSAT), agent for INTELSAT, 82-member-nation consortium.

January 31 - Apollo 14 Lunar Mission to Fra Mauro highlands by Astronauts Alan B. Shepard Jr., mission commander; Stuart A. Roosa, Command Module pilot, and Edgar D. Mitchell, lunar module pilot. Mission highlights included:

- -- Collection of Lunar rock samples and soil.
- --TV coverage from a tripod-mounted camera.
- -- Deployment of an American flag.
- --Setting up a Solar wind experiment.
- --Climb up slopes of Cone Crater by Astronauts Shepard and Mitchell.
- --Photography of the highland area around the crater Descartes by Roosa using a hand-held camera in the command module.
- --Electrophoretic separation, to demonstrate practicality of large scale processing of new vaccines not possible on Earth.
- --Heat flow and convection tests to help determine future manufacturing techniques in space.
- -- Liquid transfer, to observe the effects of different tank configurations on storage and transfer of liquids.
- --Composite casting, to evaluate the prospects for metallurgical production in space.
- --Recording of impact of lunar module purposely crashed into the Moon's surface after completion of its mission.

February 2 - Placement into satisfactory equatorial orbit of a military communications satellite from Cape Kennedy by the Unmanned Launch Operations Directorate. NATOSAT II, owned and operated by the North Atlantic Treaty Organization (NATO), was launched by a Delta vehicle for the U. S. Air Force, acting as agent for NATO. The 129 kilogram (285-pound) satellite was orbited over the Atlantic Ocean at 26 degrees west longitude.

March 13 - Successful orbit of Explorer 43 (IMP-1), the eighth spacecraft in the Interplanetary Monitoring Platform Program and the largest and most advanced spacecraft in the entire NASA Explorer series. The 288-kilogram (635-pound) automated space physics satellite contained the most advanced encoder-digital data processor system ever flown on an unmanned NASA satellite. A three-stage Delta vehicle was used to place the satellite into a highly-elliptical orbit, ranging from a high point (apogee) of 206,000 kilometers (128,033 statute miles) from the Earth to a perigee of 243 kilometers (150 statute miles) with an orbital period of approximately four days and four hours.

May 8 - First of two Mariner-Mars '71 Mission failed because of an electrical problem in the Centaur second stage autopilot system. Mariner I was planned to conduct a Mars exploration mission complementary to Mariner H or to serve as a backup if Mariner H failed.

May 30 - Second of two Mariner-Mars '71 Missions (Mariner H) launched atop an Atlas Centaur from Cape Kennedy under the direction of the Unmanned Launch Operations Directorate. Launched on a precise trajectory, the 997 kilogram (2,200-pound) spacecraft traveled at a speed of 13,450 kilometers (8,326 miles per hour).

Mariner 9 arrived at the red planet on November 13, having traveled a total of 397 million kilometers (247 million miles) before being injected into an orbit approximately 1,385 kilometers (860 miles) above the planet's surface. The spacecraft carried television cameras and five other scientific experiments to study the Martian atmosphere and surface features.

Excellent pictures of the two tiny Martian Moons were taken, revealing them to be heavily-cratered. Cameras still are operational, and detailed analysis of target areas after the dust clears is expected to reveal composition and structural characteristics of the surfaces. Lower atmosphere minor constituents, such as water vapor, should be identifiable also when the haze abates.

July 26 - Apollo 15 lunar mission was flown, to Hadley Base with Lunar Rover trips to the rim of Hadley Rille and the slopes of the Appennine Mountains. Astronauts were David R. Scott, mission commander; Alfred M. Worden, command module pilot, and James B. Irwin, lunar module pilot. Voyage highlights included:

- --Intensive investigation into the origin and history of the Moon, the Earth, the Sun and the solar system.
 - -- Three motor trips across lunar terrain.
- --Use of the Lunar Rover's color television camera enabling viewers throughout the world to observe canyon depths, crater-scarred plains, rounded mountain peaks and the Marsh of Decay.
- --Discovery of a unique crystalline stone, believed to be anorthosite a primary constituent of the primordial lunar crust perhaps some $4\frac{1}{2}$ billion years old.
- --Many geological advancements such as the configuration that the Moon's surface was built up in stages by many lava flows or ejecta blankets (showers of rock thrown up by impacts).
- --Driving of core tubes as deep as 2.36 meters (7 feet, 9 inches) into the lunar plain and placement of heat sensors into two holes to determine internal temperatures of the Moon.
- --Use of an X-ray detector to pick up secondary X-rays resulting when rays strike minerals on the Moon, indicating distribution of minerals.
- --Discovery of various minerals; radioactive elements; radioactive hotspots; dead volcanic craters; deposits of neon, argon and carbon dioxide.
 - --Deployment of Apollo Lunar Surface Experiment Package.
- --Impacting of the Lunar Module on the Moon's surface following completion of lunar landing.
- --Mankind's first walk in deep space by Worden, televised for viewing throughout the World.
- --Successful splashdown of Command Module "Endeavour", in the mid-Pacific Ocean, using only two of three parachutes.

September 28 - An Orbiting Solar Observatory (OSO-7) with a small Test and Training Satellite (TETR-D) riding in piggyback fashion were placed into a nominal orbit by a two-stage Delta vehicle with three strap-on solid propellant motors. Launched for NASA's Goddard Space Flight Center, which acted as project manager, the OSO experiment package is obtaining measurements of X-ray and ultraviolet radiation from high temperature plasma explosions of the Sun.

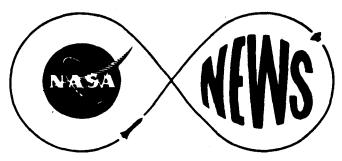
December 19 - Successful orbiting of Intelsat IV-F-3, second in the current sophisticated series of global commercial communications satellites launched atop an Atlas-Centaur vehicle by the Unmanned Launch Operations Directorate. Satellite is owned and will be operated by COMSAT. On the day following launch, the spacecraft's own motor was used to place the satellite into orbit 36,000 kilometers (22,300 miles) above the equator over the Atlantic Ocean near the location of Intelsat IV-F-2.

The Space Center's Unmanned Launch Operations Directorate also launched two spacecraft from the Western Test Range (WTR) site at Vandenberg Air Force Base.

The first, ISIS-2, which stands for International Satellite for Ionospheric Studies, was launched atop a Delta vehicle. The 263 kilogram (582-pound) Canadian built satellite studies the ionosphere, an electrical gas curtain formed by the Sun's action on the Earth's atmosphere, beginning 56.3 kilometers (35 miles) above the Earth.

ISIS-2 achieved a polar orbit with an apogee of 1450 kilometers (896 statute miles) and a perigee of 1,360 kilometers (844 statute miles). It circles the Earth once every 113 minutes with an 88.15 degree inclination to the equator.

The second Delta launch from WTR was not successful when an Improved TIROS Operational Satellite (ITOS-B) failed to reach its nominal orbit. A second stage anomaly occurred in the Delta vehicle shortly after Launch on October 21.



Ben E. McCarty 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

FOR RELEASE:

January 11, 1972 Release # KSC-8-72

KENNEDY SPACE CENTER HOSTS TEST EQUIPMENT CONFERENCE

KENNEDY SPACE CENTER, Fla.—The Kennedy Space Center (KSC) will host a three-day electronic test equipment conference for 100 Government personnel Jan. 12-14.

Representatives from the National Aeronautics and Space Administration (NASA), the Federal Aviation Administration (FAA), and the U.S. Army, Navy, Air Force and Marines will attend the series of meetings conducted by the Secretariat for Electronic Test Equipment (SETE).

SETE is an organization funded by the military services, NASA and the FAA to collect and disseminate information about test equipment for Government agencies. The contract for SETE services is administered by New York University under the direction of David M. Goodman of NYU's School of Engineering and Science.

Included on the agenda for the conference are presentations by NASA, Army, Air Force and Navy speakers.

NASA presentations will center around the design, development, procurement and deployment of automatic test equipment for the Apollo Program.

Mike Wedding, Chief of the Checkout Equipment Branch in KSC's Spacecraft Operations Directorate, will brief conferees about the Acceptance Checkout Equipment (ACE) used to qualify Apollo spacecraft.

Ross Harper, an electronic engineer in KSC's Launch Vehicle Operations
Directorate, will provide a briefing about the automatic checkout system for the Saturn V rocket.

Two afternoons during the conference will be devoted to tours of KSC facilities.

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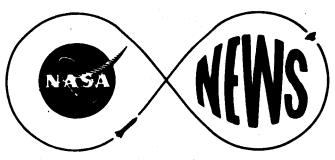
The first tour will take conferees through the Central Instrumentaion Facility, the Flight Crew Training Building, an ACE station and the high bay of the Manned Spacecraft Operations Building.

The second will be to Launch Complex 39 where the visitors will be briefed in Firing Room 4 of the Launch Control Center and then conducted through the Vehicle Assembly Building and around Pad A.

Grady Williams, KSC's Director of Design Engineering, will welcome the conferees.

Walter E. Parsons, Chief of the Systems Engineering Division in the Design Engineering Directorate, will participate in the call to order with D. A. Cox of the Army's Weapons Command. Parsons is NASA's principal member in SETE. Cox is chairman of SETE's steering group.

All meetings are scheduled to be held in the Mission Briefing Room of the Manned Spacecraft Operations Building.



Ben E. McCarty 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

FOR RELEASE:

January 12, 1972 Release # KSC-9-72

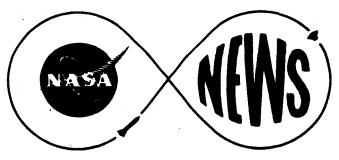
SPACECRAFT STERILIZATION SEMINAR BEGINS JAN. 19 AT SPACEPORT

KENNEDY SPACE CENTER, Fla.—The NASA Office of Space Science's Spacecraft Sterilization Technology Semi-annual Seminar will be held Jan. 19-20 in the Kennedy Space Center's Training Auditorium, with sessions extending from 9:00 a.m. to 4:30 p.m. each day.

NASA and academic prime investigators will present summaries of significant progress made on research tasks as of June, 1971.

The seminar is a program review to inform the American Institute of Biological Sciences Planetary Quarantine Advisory Panel of this progress, and to foster an interchange of recent developments in spacecraft sterilization concepts.

Attendance will be limited to available seat capacity of the auditorium in excess of 100 reserved for invited attendees.



Ben E. McCarty 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

> FOR RELEASE: January 12, 1972 Release # KSC-10-72

KSC MODIFICATIONS UNDERWAY ON CAPE'S LAUNCH COMPLEX 41

KENNEDY SPACE CENTER, Fla.—The first phase of the Kennedy Space Center's (KSC) modifications to Launch Complex 41, Cape Kennedy, is scheduled to be completed June 1, 1972, according to Jack Baltar, Manager of Site Activities for the KSC's Unmanned Launch Operations Directorate.

Baltar said the first half of 1972 will deal with the facilities modification effort, with the remainder of the year centering on installation of Aerospace Ground Equipment (AGE).

"We're in the brick and mortar effort at this time. The contract is being managed for the Air Force by the Army Corps of Engineers," Baltar said.

The National Aeronautics and Space Administration will assume control of Complex 41 in July 1973 with the arrival of the proof flight vehicle.

The complex is being modified to support assembly, checkout and launch of the newly configured Titan-Centaur, scheduled to boost two Viking soft-landing spacecraft to Mars in 1975, and two Helios probes to the vicinity of the Sun.

The new Titan rocket substitutes the Centaur upper stage for the Transtage.

Baltar noted that most of the launch complex modifications will be required to service the hydrogen-fueled Centaur. The facilities modification effort includes the laying of concrete foundations for cryogenic handling and storage areas and modification to work platforms in Cell 1 of the Vertical Integration Building.

Also included is the reconfiguring of the Universal Environmental Shelter (White Room) of the Mobile Service Tower to accommodate the Viking spacecraft and a larger payload shroud. The new shroud will cover both Centaur and payload, replacing insulation panels now used on the upper stage.

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About 35 Belko Steel Company employees currently are engaged in the facilities modification effort, and the number is expected to increase as construction progresses to the AGE phase.

Scheduled to be completed in June 1973, AGE includes the installation of piping and electrical systems servicing the launch vehicle.

New consoles to control Centaur propellant loading operations and Centaur vehicle checkout will be added to the VIB's Control Center 1. General Dynamics/Convair, the firm which builds Centaur, is fabricating this equipment, which will be installed by Martin Marietta.

Martin builds the Titan core vehicle, and is responsible for the design of the new facilities.

While KSC and the Air Force will operate the Integrate-Transfer-Launch (ITL) facility jointly, the military service will continue to launch its own Titan III vehicles from adjacent Complex 40.

Housed on three man-made islands in the Banana River, the ITL facility consists of Complexes 40 and 41, the Vertical Integration Building (VIB), the Solid Motor Assembly Building (SMAB) and related ground support equipment and control rooms within the VIB.

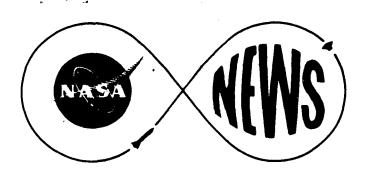
The Titan liquid-fueled core and Centaur vehicles will be assembled on a rail-mounted mobile launch tower within the VIB. The launch vehicle then is carried to the SMAB where two solid boosters are strapped on en route to the launch pad. The payload is added at the pad.

The Titan-Centaur will stand approximately 49.4 meters high (162 feet), or about 11.5 meters (38 feet) taller than the conventional Titan III used by the Air Force. Its two strap-on boosters will generate a combined liftoff thrust of nearly 1.1 million kilograms (2.4 million pounds). The first stage will be ignited at altitude, producing about 236,000 kilograms of thrust (520,000 pounds).

In other Viking planning activity, KSC last month awarded a \$350,000 contract to H. J. Ross Associates of Miami to provide architectural and engineering services for construction of two new spacecraft handling facilities at the Merritt Island Spaceport.

The firm has contracted to provide complete design, construction drawings and specifications for changes and additions to the Pyrotechnic Installation Building and Hypergolic Test Facility No. 2. Viking orbiter and landing spacecraft will be checked out, sterilized and encapsulated within these facilities.

Baltar, whose aerospace background includes work both as a contractor and with KSC's Launch Vehicle Operations Directorate, is managing Complex 41 site activities under the direction of John Gossett, Chief of ULO's Operations Branch. Jerry Tritto, whose launch vehicle experience began with the Vanguard program in the 1950's, is assisting Baltar.



John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

FOR RELEASE: February 1, 1972

APOLLO 16 PRELIMINARY TIMELINE

The Apollo 16 mission to the Moon is now scheduled for launch 12:54 p.m. EST, April 16, 1972. The first exploration of the Moon's Descartes area will begin 7:34 p.m., April 20, about four hours after landing. Splashdown on Earth is scheduled for 3:30 p.m. EST, April 28.

Apollo 16 was rescheduled from a March 17 launch after problems were discovered with a suit fitting, a lunar module battery, and the docking ring jettison device on the command module.

Spacecraft Commander is Navy Captain John W. Young; Command Module Pilot is Navy Lieutenant Commander Thomas K. Mattingly II; Lunar Module Pilot is Air Force Lieutenant Colonel Charles M. Duke.

The new preliminary timeline follows:

APOLLO 16 PRELIMINARY MISSION PROFILE

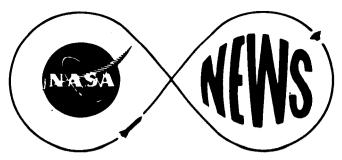
As of February 1, 1972

| Launch Window Duration | 3 hours, 48 minutes |
|-----------------------------|------------------------------|
| Translunar Flight Time | 71 hours, 56 minutes |
| Lunar Surface Stay Time | 72 hours, 58 minutes |
| Time in Lunar Parking Orbit | 147 hours, 52 minutes |
| Transearth Flight Time | 68 hours, 15 minutes |
| Total Mission Duration | 12 days, 2 hours, 36 minutes |

| • | G.E.T., Hr: Min | DAY | E.S.T., Hr: Min |
|-------------------------|-----------------|------|-----------------|
| Lift-Off | 0:00 | 4/16 | ·12:54 pm |
| Earth Orbit Insertion | 0:12 | 4/16 | 1:06 pm |
| Trans-Lunar Injection | 2:33 | 4/16 | 3:27 pm |
| Lunar Orbit Insertion | 74:29 | 4/19 | 3:23 pm |
| Descent Orbit Insertion | 78:36 | 4/19 | 7:30 pm |

-more-

| EVENT | G. E.T., Hr: Min | DAY | E.S.T., Hr: Min |
|--|--|--|---|
| Circularization Lunar Module Landing Start Extra Vehicular Activity 1 End EVA 1 Start EVA 2 End EVA 2 Start EVA 3 End EVA 3 LM Ascent Trans-Earth Injection Command Service Module EVA Reentry (400,000 feet altitude) Earth Landing | 97:42 98:47 102:40 109:40 124:40 131:40 148:40 155:40 171:45 222:21 241:57 290:23 290:36 | 4/20 4/20 4/21 4/21 4/21 4/22 4/22 4/23 4/25 4/28 4/28 | 2:36 pm 3:41 pm 7:34 pm 2:34 am 5:34 pm 12:34 am 5:34 pm 12:23 am 4:39 pm 7:15 pm 2:51 pm 3:17 pm 3:30 pm |



Dick Young 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

FOR RELEASE: 3:00 p.m. February 2, 1972 Release # KSC-24-72

MC DONNELL DOUGLAS AWARDED SPACEPORT CONTRACT MODIFICATION FOR LAUNCH TASKS

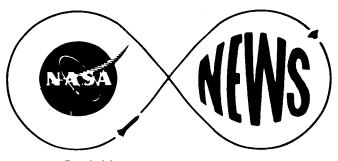
KENNEDY SPACE CENTER, Fla.—The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a \$15,945,000 contract modification to the McDonnell Douglas Corporation, Huntington Beach Calif.

The contract modification covers the period from January 1, 1972, through December 31, 1972, and covers tasks applicable to Saturn Workshop (Skylab) operations.

The \$15,945,000 contract modification brings the total value of an exisiting contract to \$60,599,698.

Specifically, the contractor is to assume the responsibilities and perform the activities for pre-launch, launch and post-launch operations of the Airlock Module, Orbital Workshop, associated ground support equipment, special test devices and facilities at the Kennedy Space Center.

KSC is NASA's launch organization for manned and unmanned luanches in Florida and for unmanned launches at the Western Test Range in California.



ORM 01- 04 (10.71) (ORI 11ML + ORM - REPORTE 101 AUTHORIZED)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

FOR RELEASE: 3:00 p.m. February 2, 1972 Release # KSC-25-72

Dick Young 305 867-2468

SPACEPORT PICKS UP SECOND YEAR OPTION ON BOEING SUPPORT CONTRACT

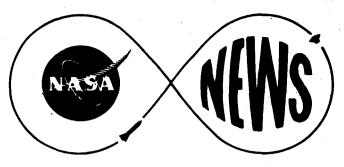
KENNEDY SPACE CENTER, Fla.—The National Aeronautics and Space Administration's John F. K ennedy Space Center has exercised a \$22,904,790 second-year option on its base support contract with the Boeing Company's Field Operations and Support Division, Kennedy Space Center, Fla.

The contract extension brings the total value of the existing agreement to \$42,122,790.

Under the agreement, Boeing is to provide base support services for NASA at the Kennedy Space Center and the Cape Kennedy Air Force Station.

These services include test support management, plant engineering and maintenance, logistics operations, security services, fire prevention/protection and rescue services, documentation support services, quality assurance and training.

KSC is NASA's launch organization for manned and unmanned space vehicles in Florida and for unmanned launches at the Western Test Range in California.



John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

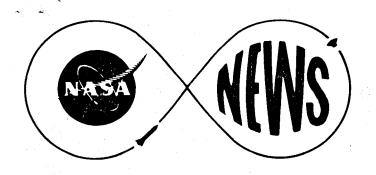
FOR RELEASE:

305 867-2468

NOTE TO EDITORS:

To accommodate media representatives who desire to cover the ceremony marking the tenth anniversary of the Friendship 7 mission, scheduled at Complex 14, Cape Kennedy Air Force Station, at 10:00 a.m., Tuesday, February 22, the Kennedy Space Center will escort writers and photographers in a press bus from the Apollo News Center, 1355 North Atlantic Ave., Cocoa Beach, to the site.

A press bus will depart the Cocoa Beach News Center at 9:00 a.m.



John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

FOR RELEASE:

Upon receipt Release # KSC-37-72

A. H. Lavender 305-867-2201

CEREMONY TO MARK 10TH ANNIVERSARY OF FRIENDSHIP 7 FLIGHT

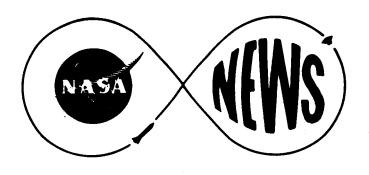
KENNEDY SPACE CENTER, Fla.—The tenth anniversary of the flight of Friendship 7, the first U. S. manned orbital mission, will be observed at the Kennedy Space Center February 22.

Col. John Glenn, Jr., USMC (Ret.), first American to fly around the Earth, will be the guest of honor.

The ceremony will take place at Launch Complex 14 from which Glenn began his historic journey aboard a Mercury spacecraft carried on a Mercury Atlas launch vehicle.

Invitations to attend the ceremony have been dispatched to Government and aerospace industry members of the Mercury team which was led by NASA's Space Task Group, directed by Dr. Robert R. Gilruth. G. Merritt Preston, KSC Future Programs Director, supervised launch o perations. The Air Force 6555th Aerospace Test Wing prepared the Atlas vehicle.

The Eastern Test Range is cooperating with KSC in arrangements to accommodate 3,000 invited guests and dignitaries. The ceremony will begin at 10 a.m.



John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

305 867-2468

FOR RELEASE: AMs February 18, 1972 Release # KSC-40-72

EUROPEAN INDUSTRIALISTS VISIT SPACEPORT

KENNEDY SPACE CENTER, Fla. -- Forty-five industrialists and educators from eight nations will visit the Center today (Feb. 18) as guests of NASA.

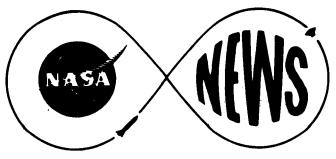
This is the last leg of a week-long orientation program for the guests whose trip to the United States was arranged by the London Financial Times.

They visited NASA headquarters in Washington, the Goddard Space Flight Center, Marshall Space Flight Center and the Manned Spacecraft Center before arriving in Brevard last night.

The group represents major industrial firms or institutes in England, Sweden, Denmark, Germany, France, Italy, Holland and Belgium.

Among the visitors are:

John Geddes, tour organizer; Prof. J. M. Buxton, British Computer Society; L. J. Sabatini, Ministry of Defense; Dr. E. Svizzeretto, Snia Voscosa, Italy; General R. Sauvanet, France; Dr. R. Rickett, London Polytechnic; Peter Bernards, Germany; B. Gustafsson, Sweden; H. Gustin, Belgium and B. L. Goudsmith, Holland.



Dick Young 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

FOR RELEASE:
February 17, 1972

February 17, 1972 Release # KSC-43-72

PIONEER ON SCHEDULE FOR LAUNCH ON FEBRUARY 27

KENNEDY SPACE CENTER, Fla.—Successful completion of the flight acceptance composite test of Centaur-Pioneer F by KSC's unmanned launch organization today moved the preparations one step closer to launch of the mission to Jupiter scheduled for February 27.

Purpose of today's test was to demonstrate the operation of all airborne electrical systems during simulated flight.

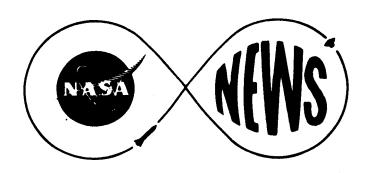
Daily tests will continue Friday and next week. Special attention is being paid to the third stage, a solid propellant rocket, which will be flown for the first time on the Atlas-Centaur combination.

Additional velocity is required to hurl Pioneer F faster than any man-made object has previously traveled through space in order to reach the planet in approximately two years.

John Gossett, chief of the Centaur Operations Branch, KSC and Daniel Sarokon, site manager for General Dynamics Convair, supervise the test schedule. GDC builds the Centaur space vehicle, which will be launched from Complex 36 on Cape Kennedy.

Highlights of next week's preparations include a spacecraft countdown rehearsal, third stange integration checks, flowing RP-1 fuel into tanks of the Atlas booster, installation of the third stage heat shield, removal of the service tower to permit radio frequency checks, installation of pyrotechnics and flight batteries.

The launch window opens at 8:52 p.m. February 27.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

FOR RELEASE:

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NOTE TO EDITORS:

The following Apollo 16 briefings and final Apollo 16 crew press conference are sheeduled beginning Wednesday, March 15, 1972 in Houston at the Manned Spacecraft Center. For additional details call Area Code 713 483-5111 MSC Public Information Office.

Wednesday, March 15:

1:00 p.m. CST, Mission Planning Briefing

3:00 p.m. CST, Lunar Surface Operations Briefing

Tuesday, March 16:

8:30 a.m. CST, Mission Science Briefing

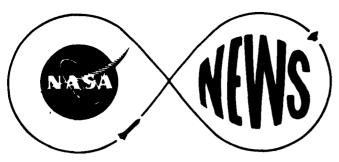
p.m. To Be Announced

Friday, March 17:

1:00 p.m. CST, Apollo 16 Crew Press Conference (Building 1 Auditorium)

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March 8, 1972



Ben McCarty 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

March 9, 1972

Release # KSC-55-72

APOLLO 16 FLIGHT READINESS REVIEW IS SCHEDULED FRIDAY AT SPACEPORT

KENNEDY SPACE CENTER, Flay--The Apollo 16 Flight Readiness Review (FRR) will be conducted Friday at the Kennedy Space Center (KSC) to gather status reports from various NASA elements that are helping prepare the space vehicle for this Nation's fifth lunar landing mission.

Key officials from NASA Headquarters, KSC, the Manned Spacecraft Center (MSC) and the Marshall Space Flight Center (MSFC) will go over the results from the recent Flight Readiness Test of the space vehicle, plus the reports from the various Centers.

Key officials attending the FRR include:

--NASA Headquarters: Dale Myers, Associate Administrator, Office of Manned Space Flight; Dr. Rocco Petrone, Apollo Program Director; and Chet Lee, Apollo Mission Director.

--KSC: Dr. Kurt H. Debus, Center Director; Walter J. Kapryan, Director of Launch Operations; and Robert C. Hock, Director of Apollo-Skylab Programs.

--MSC: Dr. Chris Kraft, Center Director; Sid Sjoberg, Deputy Director; James McDivitt, Apollo Program Manager; and Donald K. Slayton, Director of Flight Crew Training.

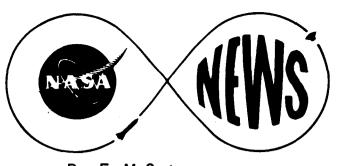
--MSFC: Dr. Eberhard Rees, Center Director; Dr. William R. Lucas, Deputy Director, Technical; J. T. Shepherd, Director of Program Management; and Richard G. Smith, Saturn Program Manager.

The next major Apollo 16 checkout activity will be the Countdown Demonstration Test (CDDT), scheduled to begin March 22. The T-0 for the "wet" portion of the CDDT -- when propellants are brought aboard -- will be reached on March 29.

The count will then be recycled and counted down in the "dry" portion -- with the astronauts on board and conducting checks in much the same manner as they will on launch day -- to a T-O on March 30.

The countdown to launch will begin April 10, leading to liftoff at 12:54 p.m. on April 16 from Pad A, Launch Complex 39.

The crew of Commander John Young, Command Module Pilot Thomas K. Mattingly and Lunar Module Pilot Charles Duke will fly a 12-day mission to the Moon, with Young and Duke landing in the Descartes area. The landing site is a relatively smooth area nestled in the picturesque and rugged lunar highlands.



Ben E. McCarty 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

> FOR RELEASE: March 9, 1972 Release # KSC-56-72

JIM RAGUSA NAMED ADMINISTRATIVE ASSISTANT TO KENNEDY SPACE CENTER'S DEPUTY DIRECTOR

KENNEDY SPACE CENTER, Fla.--Jim Ragusa of Titusville, Fla., an employee in the Support Operations Directorate, has been appointed administrative assistant to Miles Ross, Deputy Director of the Kennedy Space Center (KSC).

In filling a one-year term on the rotating position, Ragusa replaces Jack Gerding, who is now performing a similar role for Paul Donnelly, Associate Director of Launch Operations.

The position under Ross was created to assist him obtain information on plans and programs related to technical and administrative activities not resolved through normal organizational elements.

Ragusa will maintain close contact with appropriate levels of KSC management, other NASA centers, industry and other Government agencies in order to be in a position to receive and exchange technical and other information that might be of interest to the Deputy Director.

One of Ragusa's recurring assignments is to conduct a thorough and rapid review and analysis of volumninous technical and administrative documentation, preparing a synopsized overview for Ross.

Ragusa has a combination of technical and administrative backgrounds, and the nature of the job will require him to keep up with a multitude of KSC activities and to know where to go for the answers.

While serving as an assistant to Robert Gorman, Director of Support Operations, he has interfaced with many Spaceport organizational elements and contractors, fulfilling requirements related to future study activities.

Within a few months, Ragusa expects to complete the requirements for a doctorate degree in business administration from Florida State University.

NASA Headquarters has expressed an interest in his thesis -- an operational blueprint that features male and female scientists, engineers and technicians of many nations working together in an orbiting space community.

His other academic credentials include a Bachelor of Science degree in Mechanical Engineering from the University of Illinois, and a Master of Science degree in Management from Florida State University.

The native of Chicago, III., a personal friend of many astronauts after working with them on several emergency rescue systems, was the first person to manrate the emergency egress slide wire at Launch Complex 34 prior to the launch of Apollo 7.

Wearing a flight suit and crash helmet, and harnessed to a trolley attached to a stainless steel cable, Ragusa descended more than 22 stories from the pad's umbilical tower to prove a system he helped develop.

"Our group proved we had a safe egress emergency system if the Apollo 7 crew needed it," he recalled.

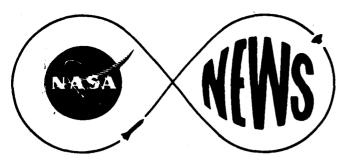
In helping qualify another emergency system, Ragusa and six others participated in the first feasibility test of the underground blastroom beneath Pad A at Launch Complex 39.

Sealed inside for 24 hours, the team simulated the procedures personnel would follow in the event of an emergency on the pad above. He had had similar experience before, having logged about three years in and out of Titan II missile silos as a young Air Force officer.

He and his wife, Barbara, have three children, Sally 9, Mark 7, and Michele 3. During the past summer, Sally and Mark travelled the Florida AAU competitive swimming circuit.

Also last summer, the Ragusas travelled to the former Republic of Ragusa, now Dubrovnik, Yugoslavia, and to Ragusa, Sicily.

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

FOR RELEASE:

April 12, 1972 Release KSC #80-72

B. E. McCarty 305 783-7781

KSC AWARDS ECOLOGICAL STUDY GRANTS TO FTU, FIT

Just .

KENNEDY SPACE CENTER, FLA.—Dr. Kurt H. Debus, Director of the Kennedy Space Center (KSC), has awarded grants to Florida Technological University (FTU) in Orlando and Florida Institute of Technology (FIT) in Melbourne for ecological studies involving the sprawling Spaceport, much of which is a wildlife refuge.

The grants, each totaling approximately \$90,000 for the period through June, 1973, were made to FTU President Charles N. Millican and FTT President Jerome P. Keuper with provisions for extensions.

William H. Lee, Bioscience Staff Officer of Launch Operations at KSC, is the Technical Manager for these grants. Dr. Alan C. Harter, Chief of Medical Services at the Spaceport, is serving as Assistant Technical Manager and as professional consultant.

Rear Adm. O. D. Waters, Jr. (ret.), head of the Department of Oceanography at FIT, and Dr. Harvey A. Miller, Chairman of the Department of Biological Sciences at FTU, will coordinate the programs for their respective institutions.

The principal investigators (PI) at FTU are Dr. Haven C. Sweet, Dr. Llewellyn M. Ehrhart and Dr. Franklin F. Snelson, Jr., while the PI's at FIT are Dr. T. A. Nevin, J. A. Lasater and K. B. Clark.

The FIT proposal calls for a "Study of Lagoonal and Estuarine Ecological Processes in the Area of Merritt Island Encompassing the Space Center." It will determine and study the living processes in the ecosystem which would most likely lend themselves for use as indicators of significant changes in the environment.

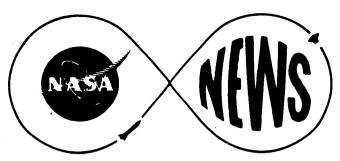
Accurate assessment of the ecosystem will require application of the following primary disciplines: biology, microbiology, chemistry, biochemistry, oceanography, geology and engineering-hydrology.

In undertaking "A study of a Diverse Coastal Ecosystem on the Atlantic Coast of Florida," FTU will divide land areas and associated waters at the

Spaceport into geographical zones. These zones will be intensively sampled for life forms for comparative academic studies.

The four major objectives of this study are:

- -To investigate and document the life forms and ecology of the study area.
 - -- To determine both short and long-term dynamics of the ecosystems.
- -- To study the effects of both internal and external forces on these dynamic systems.
- -To provide meaningful experience to graduate and undergraduate students who are developing careers in bio-environmental sciences, conservation and pollution control.



Dick Young 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

FOR RELEASE:

April 26, 1972 KSC Release #88-72

DISMANTLING OF COMPLEXES 34-37 BEGINS MAY 1

KENNEDY SPACE CENTER, Fla.—Stripped of all useful structures and equipment, the remains of Saturn 1/1B Launch Complexes 34 and 37 will be dismantled over a seven-month period beginning May 1.

The General Services Administration's Southeast Region with Headquarters in Atlanta, G., working with KSC to maximize the government's return on disposing of the complexes, has announced that a contract has been let to Southern Contractors Service, Columbia, South Carolina, to tear down the giant structures.

George Harrington, Chief of the Logistics Division of Installation Support at KSC, said a total of \$53,856,403 in structures and equipment from the two complexes has been reutilized, "one of the highest returns ever for a program of this magnitude."

The total estimated acquisition value of the two complexes and related industrial property is \$147,990,581. The \$53,856,403 reutilization figure gives the government a recovery of approximately 37 per cent, unusually high for facilities so highly specialized.

The decision to dismantle the two complexes came after it was decided to conduct all future manned launches from the Spaceport's Complex 39. LC 34-37 were used for 15 Saturn 1 and Saturn 1B launch vehicles, including the launch of Apollo 7, the first manned flight in the Apollo series.

The South Carolina firm bid \$15,051 for the remains of the two complexes and is now moving its cranes to Cape Kennedy for the task of dismantling the towering steel structures which are virtually all that is left of the two once-bustling launch facilities.

According to GSA, the seven-month job will begin May 1. The seven-month dismantling proposal offered by Southern Contractors was two months shorter than that offered by other bidders and the Government will save an additional \$42,000 in operating costs, giving the Government an adjusted return of \$57,051 for the Southern Contractors offer.

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Harrington said on-going NASA programs had first preference on reutilization of the equipment.

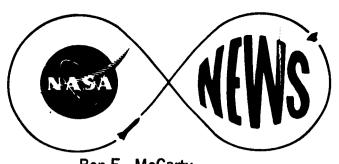
As a result, these NASA centers received the following amounts in equipment values for the Skylab Program: KSC \$5,793,285; Marshall Space Flight Center, \$5,558,127, and Lewis Research Center, \$446,866. Equipment valued at \$2,918,595 has been set aside to use in the Shuttle program.

In addition, \$4,191,057 in equipment is to be utilized by KSC's Unmanned Launch Operations for the Viking Program at Launch Complex 41 and for other unmanned programs. The blockhouses and peripheral equipment at Complexes 34 and 37 are being taken over by KSC Public Affairs for tour stop purposes.

Approximately \$90,000 worth of equipment is being set aside for use in the proposed Space Information and Education Center.

In completing the NASA screening, an additional \$6,810,100 was earmarked for reutilization at KSC and \$4,937,035 at other NASA centers for miscellaneous programs.

Other agencies screening and/or reutilizing equipment on the two complexes included the Atomic Energy Commission, the Departments of Commerce, Interior and Agriculture, Corps of Engineers, the Department of Health, Education and Welfare and universities involved in research grants administrated by Federal agencies. These agencies utilized \$5,891,866 worth of equipment.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

> FOR RELEASE: April 26, 1972 Release # KSC-89-72

Ben E. McCarty 305 867-2468

KSC HOSTS YOUTH SCIENCE CONFERENCE

KENNEDY SPACE CENTER, Fla.—The Kennedy Space Center (KSC) is host today to 20 high school students from Puerto Rico, Georgia and Florida who are attending the Region IV Youth Science Congress.

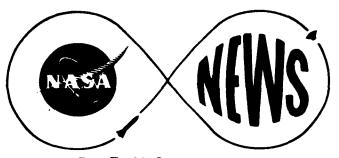
A committee of evaluators rated student presentations and selected winners at the Congress, jointly sponsored by NASA and the National Science Teachers Association.

The committee includes Dr. Jack Armstrong, assistant professor of secondary education; Dr. Graeme Baker, chairman of the chemistry department; Dr. John Bolte, associate dean for academic affairs; Dr. Douglas Brumbaugh, assistant professor secondary education; Dr. Harvey Miller, chairman of biological sciences and Dr. Henry Whittier, associate professor of biological sciences, all from Florida Technological University.

Teacher-sponsor delegates include Mrs. Patricia Denninghoff, Merritt Island High School; Mrs. Mary Alice Fryar, Terry Parker High School, Jacksonville; Dr. Walter Kruschwitz, University of South Florida, Tampa; Lonnie Love, president of the Georgia Science Teachers Association, and Mrs. Aurora Melendez, Jose M. Lazaro High School, Carolina, Puerto Rico.

Morris R. Lerner, President, National Science Teachers Association, will be the dinner speaker this evening at the Holiday Inn, Cocoa Beach. Sam Beddingfield, of KSC Future Programs, will brief the group on the Space Shuttle and Earth resources.

Students will make their presentations through Friday and the awards will be presented at a luncheon in the KSC Cafeteria at noon that day.



Ben E. McCarty 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

> FOR RELEASE: April 26, 1972 Release # KSC-90-72

FOUR BREVARD STUDENTS ACTIVE IN SCIENCE CONGRESS

KENNEDY SPACE CENTER, Fla.—Four Brevard County students are participating in the Region IV, Youth Science Congress which opens today at the Kennedy Space Center (KSC) and concludes Friday.

Twenty students will present scientific papers selected as outstanding by a committee of Florida Technological University professors. The students will receive awards at the closing luncheon and will then be eligible for a subsequent national competition.

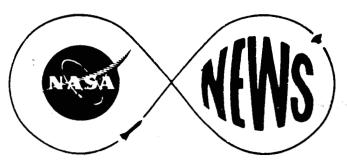
Marc McConahy, Satellite High School, will present a "Comparative Study of Hypersensitization Methods for Astrophotography" at Thursday's session.

Corey J. Mullins, Merritt Island High School, will discuss 'Water, Water Everywhere, Nor Any Drop to Drink."

Mark B. Rittmanic, Merritt Island High School," will present a paper on "Mid brain Reticular and Caudate Nucleus Formation Influence on Sub-level Kindling of Amygaloid Focal Epilepsy."

Michael K. Robel, Merritt Island High School, will discuss "Effects of Slots on the Performance of Model Rockets."

Students will tour KSC and hear briefings on astronaut safety procedures and the Space Shuttle, and visit the microchemical analysis laboratory.



Dick Young 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

Not: Tuly 3

FOR RELEASE:

June 22, 1972

Release # KSC-145-72

SPACEPORT EXTENDS FEDERAL ELECTRIC CONTRACT

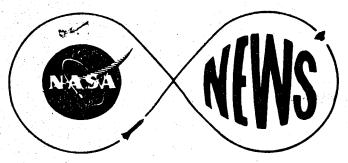
KENNEDY SPACE CENTER, Fla.—NASA's John F. Kennedy Space Center has awarded the Federal Electric Corporation, Paramus, New Jersey, a one-year, \$19,981,596 extension of its base support contract.

The award covers the period July 1, 1972, through June 30,1973, and extends the contract into its sixth year of performance. The cost plus award fee contract was negotiated competitively and provided for a total of five years with annual renewal of performance.

The latest extension brings the overall value of the contract to \$113,975,440.

The Federal Electric Corporation provides numerous launch instrumentation and communications support services for the manned Apollo and Skylab Programs as well as a wide variety of internal communications systems, computer operations and automatic data processing, measurements, instrument calibration and reference standard laboratories.

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U. Wright Kerns 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

FOR RELEASE:

June 24, 1972 Release # KSC-150-72

ORLANDO ENGINEERING FIRM RECEIVES SPACEPORT CONTRACT

KENNEDY SPACE CENTER, Fla.—The engineering firm of Howard, Needles, Tammen & Bergendorff of 420 West Grant St., Orlando, Fla. has received an \$82,000 fixed fee contract from NASA's KSC.

The contract calls for a preliminary site survey for an aircraft landing facility at Kennedy Space Center, Fla. The contractor will provide all personnel, equipment, supplies, and appurtenances, to perform a topographical survey, subsurface investigation field testing, laboratory analysis, evaluation of results, and a final report.

This Launch Complex 39 site survey is for proposed Space Shuttle Landing Facility.

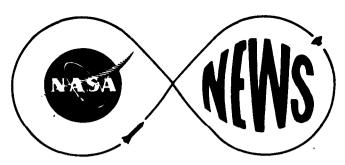
This period of performance will be June 21, 1972 through September 30, 1972.

The Space Shuttle is to provide a new space transportation capability designed to substantially reduce the cost of space operations and support a wide range of scientific, defense and commercial uses.

The orbiter stage of the Shuttle is to have the capability to reenter the atmosphere and then make a landing on a runway like an airliner.

The Kennedy Space Center is to be the prime launch and recovery site with facilities to be built later at the Air Force Western Test Range in California.

Manned horizontal test flights are scheduled to begin in 1976. with the first manned orbital flights in 1978.



C. T. Hollinshead 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

FOR RELEASE: August 30, 1972

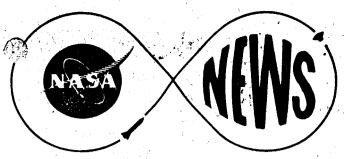
NOTICE TO MEDIA:

The Public Information Office has moved from the News Center (parachute building) to Room 1207 in the KSC Headquarters Building.

Though phone service may be temporarily interrupted, during the move,

867-2468 will remain the office phone number.

Members of the news media wishing to conduct business with the Information Office should proceed directly to the Headquarters Building after entering the KSC Gate. Three-hour guest parking spaces are available on the street in front of the Headquarters Building or press may use the employee parking area in the rear of the building if all of the visitor spaces are filled.



C. T. Hollinshead 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

> FOR RELEASE: FRIDAY September 29, 1972 Release # KSC-279-72

W.H.ROCK TO MANAGE SCIENCES & APPLICATIONS PROJECTS OFFICE

KENNEDY SPACE CENTER, Fla.--William H. Rock has been appointed Manager of the KSC Sciences and Applications Projects Office, Dr. Kurt H. Debus, Center Director, announced today.

The new staff office will become the Center's interface with NASA's Office of Applications. Mr. Rock will be responsible for project management of space science applications at Kennedy including earth resources, environmental observations, communications, Earth and ocean physics, space processing and technology applications.

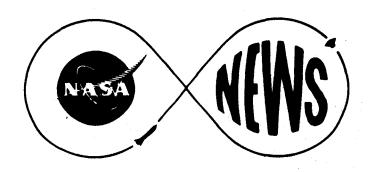
He has served as Assistant Program Manager, Apollo-Skylab Programs, since June 1970. He came to KSC in August, 1968 as chief of Apollo and Skylab reliability, quality assurance and systems safety.

His prior assignments in NASA included positions in the Headquarters and at Goddard Space Flight Center.

Mr. Rock is a graduate of Johns Hopkins University where he received a degree in engineering science and also performed graduate study in operations research. He is a member of the American Society of Quality Control and the American Institute of Industrial Engineering.

He received the Army Commendation Medal in 1961, and KSC Certificates of Commendation for the first lunar landing in 1969 and for the Apollo 14 mission in 1971. He received Group Achievement Awards for manned flight awareness in 1969 and for participation in a source evaluation board in 1971.

Mr. Rock, his wife, Nancy and their three children live in Cocoa Beach.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

> FOR RELEASE: October 31, 1972 Release #KSC-298-72

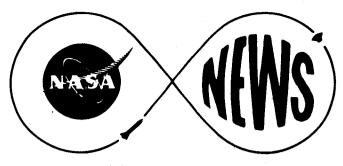
KSC TO EXPAND VISITOR FACILITY

NASA today authorized construction of two additional buildings to augment the existing visitor facilities at the Kennedy Space Center.

NASA opened a Visitor Information Center August 1, 1967. The facility now provides some 36,500 square feet of air conditioned space 3 for housing exhibits, films, a lecture hall, snack bar and ticket sales area for the daily bus tours operated from this location. This facility is open throughout the year except on Christmas Day.

A steady increase in public attendance, accelerated by the opening of Disney World 50 miles away, has crowded the existing facility beyond capacity, especially during peak periods. The new buildings will add some 38,600 square feet of space and will become available to the public by 1974.

The Congress authorized NASA \$2.1 million for these additional facilities. Charles Luckman Associates have designed the new buildings. KSC will install additional space exhibits which will complement those in the present Visitor Information Center.



Dick Young 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

> FOR RELEASE: November 14, 1972 KSC-320-72

NASA ADMINISTRATOR ADDRESSES KSC PERSONNEL

KENNEDY SPACE CENTER, Fla.—Dr. James C. Fletcher, NASA Administrator, visited the nation's Spaceport Tuesday to receive briefings on KSC plans for Apollo 17, Skylab and other NASA programs to be conducted during the 1970s.

Dr. Kurt H. Debus, KSC Director, and members of the Policy Staff made presentations on KSC plans and facilities for Skylab, the Apollo-Soyuz Test Project involving the Soviet Union, Space Shuttle, applications programs and the Viking unmanned Mars missions scheduled for launch in 1975.

Dr. Fletcher made room in his schedule to address a capacity audience of approximately 300 KSC personnel in the Training Auditorium on the agency's plans and its prospects for the future.

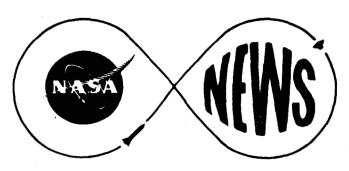
The NASA Administrator spoke of Presidential backing for such programs as the Space Shuttle and the joint Earth-orbital mission with the Russians as well as wide-based support in the Congress for a balanced manned and unmanned space program.

Dr. Fletcher noted that the NASA budget had been stable for the past several years after a period of declining expenditures. He indicated it appeared probable that the agency could look forward to a continuation of its present level of effort in the 1970s.

During the afternoon, Dr. Fletcher visited the Vehicle Assembly Building to view the Saturn V/Orbital Workshop and the Saturn IB launch vehicle which will place the first Skylab crew in orbit.

His itinerary include a tour of the Visitors Information Center which is to receive approximately 1.5 million visitors during 1972 and the Manned Spacecraft Operations Building where the Apollo Telescope Mount, Airlock Module/Multiple Docking Adapter and Payload Shroud for Skylab are being prepared for launch late next April.

Policy Staff members making presentations included Miles Ross, KSC Deputy Director, "KSC Planning Overview"; G. Merritt Preston, Director of Center Planning and Future Programs, "Shuttle Management and Organization Planning"; Raymond L. Clark, Director of Design Engineering, "KSC Shuttle Facilities", and Dr. Robert H. Gray, "Viking Program Planning at KSC".



A. H. Lavender 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

> FOR RELEASE: December 29, 1972 Release #KSC-347-72

KSC ACHIEVES PERFECT LAUNCH RECORD IN 1972

KENNEDY SPACE CENTER, Fla.--KSC compiled a perfect launch record--a first--with 13 successful launches in 1972.

Although more space vehicles were successfully launched during several previous years, the current year marked the first achievement of 100 percent successes.

In addition to Apollo 16, the fifth successful U. S. lunar landing mission, and Apollo 17, final mission in the Apollo series, 11 unmanned launches were also successful.

The unmanned scientific and applications launches included four using Atlas-Centaur boosters from Complex 36, and seven using Delta boosters, two from Complex 17 and five from the Western Test Range.

Twice-on January 23 and June 13 -- an Atlas-Centaur launched an Intelsat IV communications satellite for COMSAT, agent for the International Telecommunications Consortium. These spacecraft, joining others already in orbit, expanded worldwide communications and television capabilities for the 83 member nations of Intelsat.

An Atlas-Centaur with a Delta third stage launched Pioneer 10 on a 21-month trip to flyby Jupiter. As the new year begins Pioneer 10 will have traveled approximately 644-million kilometers (400-million miles) from Earth and will be moving toward Jupiter at 58,700 kilometers (36,500 miles) per hour. As Pioneer 10 left the Earth's field of gravity on its trip through the solar system, it reached a speed of more than 49,900 kilometers (31,000 miles) per hour, faster than any man-made object had ever traveled before.

Pioneer 10 will take the first photographs from outer space of Jupiter's surface and perform a variety of scientific data gathering functions. Then, using the gravity pull 3/3/72 of Jupiter and its own momentum to change its trajectory it will become the first craft to leave the solar system to travel into interstellar space.

The last Atlas-Centaur launch of 1972 placed an Orbiting Astronomical Observatory, OAO-3, in orbit for a study of energy sources and the composition and physical structure of gasses and dust in interstellar space.

The first Delta launch of 1972 was a Highly Eccentric Orbiting Satellite, HEOS-A-2, on January 31, from the Western Test Range. Launched for the European Space Research Organization (ESRO), the satellite is gathering data on the high altitude atmosphere and its boundary in the region around its northern central point.

TD-1, an ESRO astrophysical satellite containing seven experiments from six European nations, was launched from the WTR by a Delta on March 12. Its orbital path is above the atmosphere and beneath the Van Allen radiation belts, with an apogee of 542 kilometers (337 miles) and a perigee of 523 kilometers (325 miles).

ERTS-1, the first spacecraft designed for a systematic study of the Earth's resources, was launched from the WTR on July 23. The spacecraft has returned thousands of detailed 7/23/72 photographs of the Earth's surface, now being used by scientists to identify and catalog the planet's geologic and soil features, areas of vegetation, timber areas, ecology, land use, soil erosion and many other resources.

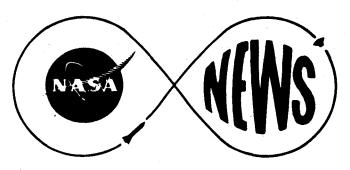
Explorer 47, an Interplanetary Monitoring Platform, was the the first unmanned spacecraft launched from KSC's Complex 17 in 1972. The September 22 launch placed the spacecraft into a high earth orbit where it is obtaining data on solar flares and radiation in the area between the Earth and the Moon.

An improved TIROS Operational Satellite, NOAA-2, was launched from the WTR on October 15. Equipped with two television cameras for daylight use and an infrared camera for nighttime photography, the satellite covers the surface of the entire Earth during sequential orbits.

KSC-347-72 Page 3

Anik-1, Canada's first domestic telecommunications satellite, was launched by a Delta from Complex 17 on November 9. In geosynchronous orbit, the satellite is providing television and telephone communications to the northern remote areas of Canada and connects major eastern and western Canadian cities.

The last Delta launch of the year was Nimbus-E, a research and development meteorological satellite, successfully fired into Larth orbit from the WTR on December 10, winding up 1972 with a perfect launch record.



A. H. Lavender 305 867-2468

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

John F. Kennedy Space Center Kennedy Space Center, Fla. 32899

> FOR RELEASE: December 31, 1972 Release #KSC-348-72

EEO PROGRAM STRENGTHENED AT KSC IN 1972

KENNEDY SPACE CENTER, Fla.--A steady increase in the number of minority and female employees at the Kennedy Space Center - in both NASA and contractor ranks - occurred during 1972.

The KSC programs for equal employment opportunity are administered by Herbert M. Huie and Nathaniel Pilate of the Contractor Compliance and Equal Employment Opportunity Office.

Huie formerly was KSC's EEO representative to contractors and Pilate was the civil service EEO officer. However, on September 5, Congress proposed the uniting of the programs and the establishment of a single office. The single office was established at KSC on November 3 with Huie in charge.

He and Pilate report activities directly to the office of KSC Director of Administration G. A. Van Staden.

The single office allows the two men to coordinate efforts to solve common problems. It also affords the EEO program a greater visibility, Huie noted.

During the first 18 months of the EEO program at KSC - from April 1971 through September 1972 - the number of contractor employees at the Center increased by 249 to 11,382, a change rate of 2.2 percent. Female employment during that 18 months increased by 128 persons to 1,240 - an 11.5 percent increase.

The increase in minority personnel during that year and a half was from 609 to 847, a percentage increase of 39.1 percent.

During the third quarter of 1972, KSC contractor personnel increased by 162 spaces, and the minority population increased during the quarter by 70 persons to a new high for the Center of 7.44 percent of the contractor work force.

Huie said the eventual goal of his office is to have the percentage of minority workers at KSC equal to the percentage of minorities that live in the personnel recruitment area of the Center. "Our office considers Brevard County as that basic area," he explained.

The current minority population in Brevard County, based on the 1970 census, is 9.4 percent.

Huie said the improvement shown so far points up the efforts of the Center's team, working with contractors and the community.

Huie noted that each contractor is required by the Office of Federal Contracts Compliance (OFCC), administrator of the contractor EEO program, to analyze his work force, check out weaknesses in the company's employment profile and establish commitments to overcome such weaknesses. The company sets up its own time basis for the solving of any problem that might be uncovered. A review of such action is made to determine if a good faith effort has been or is being made by the company.

"The biggest job for the contractors is to initiate a positive upward mobility program, insuring opportunities for minority promotion within the corporate structure," Huie pointed out. He feels progress is being made.

Related to this is the placement of minority personnel into all of the various catagories of jobs at the Center, and in significant numbers in each catagory.

Pilate noted the NASA KSC workforce included 2.09 percent minority personnel during April 1971, and this figure had increased to 2.6 percent as the close of the third quarter of 1972.

He pointed out that the NASA workforce had decreased slightly during this 18-month-period and that only a small number of persons had been hired. Despite this, the minority percentage had gone up. This is an encouraging sign, he believes.

Pilate said the KSC EEO Affirmative Action Plan, calling for improvement in utilization of minority and women employees and for increasing employment opportunities for minorities and women at the Center was slowly being implemented.

"The program is concerned with recruitment selection, promotion and training. In time, we hope to correct past weaknesses and to insure that minorities and women are offered increasingly better opportunities in recruitment and selection," Pilate emphasized.